# The Path to Create a Better Future

Mobarakeh Steel Company (MSC)
Sustainability Report | 2023

In The Name of GOD

# The Path to Create a Better Future

MSC Sustainability Report | 2023

# Contents

# Introduction

“Steel has always been an essential part of our life from the past until now, therefore, steel has been called the fabric of life.”

# Who are we?

Mobarakeh Steel Company (MSC) is one of the leading Iranian companies that works in the field of steel sheet production. MSC, which is now one of the largest industrial units of the Islamic Republic of Iran, is located in a land of 35 square kilometers near the city of Mubarakeh and 75 kilometers southwest of the city of Isfahan. The company, with its mission to play a central role in the country's industrial, economic and social development and to promote the level of steel industry technology, as an organization in the world, has a significant share of the country's steel production for use in automotive and manufacturing industries, light metal industries, heavy metal industries and flood transmission volumes, packaging industries Household and electrical appliance industries and pipe and profile industries produce.

## CEO:

Mohammad Yaser Tayebnia

## Business areas:

Iron making, steel making and production and sale of flat steel products

## Main products:

Hot steel coil, hot steel sheet, acid washed steel coil, cold steel coil, cold steel sheet, narrow steel strip, tin-plated steel coil, tin-plated steel sheet, galvanized steel coil, colored steel coil

## Number of employees:

12092

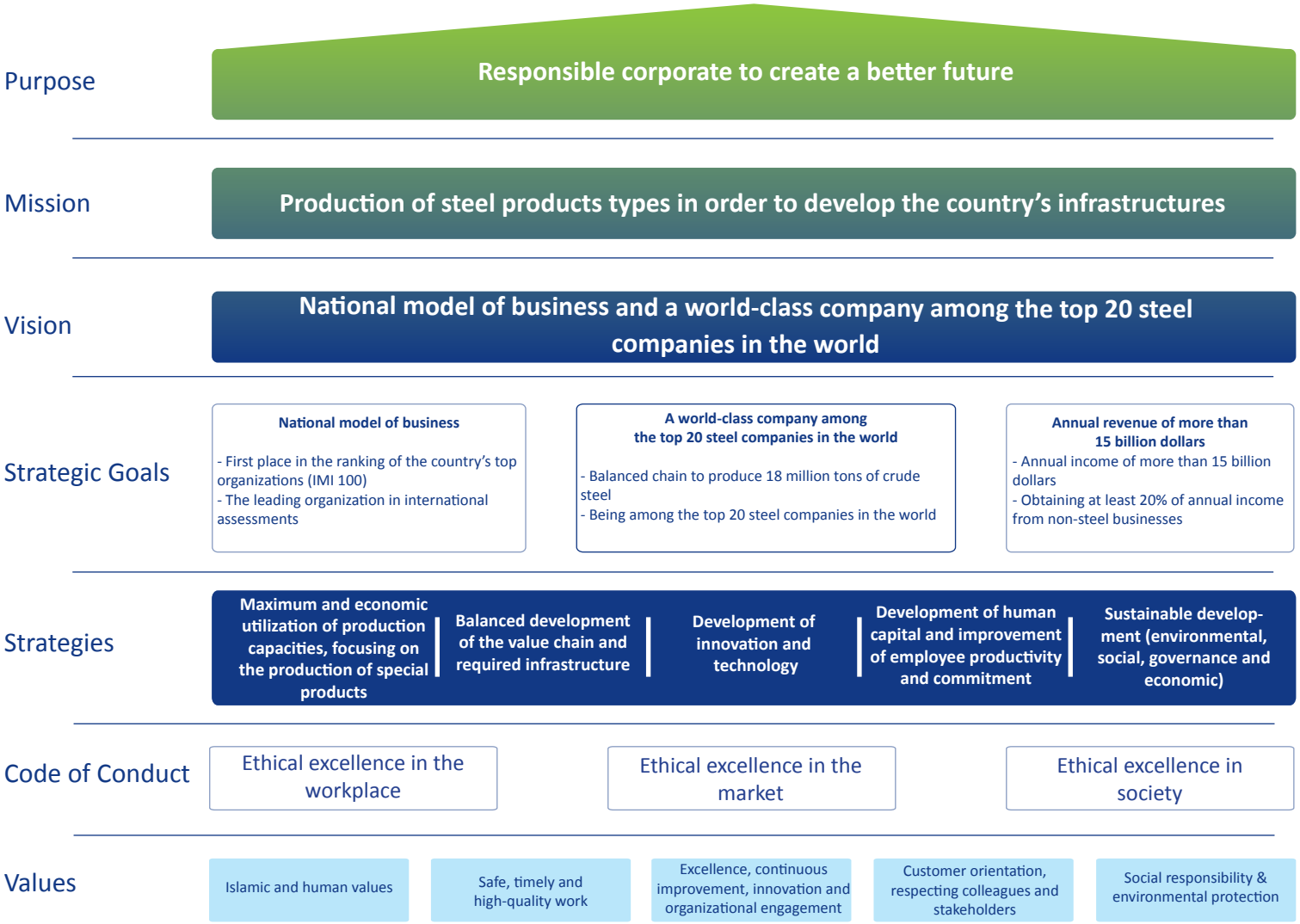
## Headquarters:

MSC Complex , Mobarakeh, 75km southwest of Isfahan
the beginning of Saadat Abad Street, Azadi Square, Isfahan
No. 2, Gol Azin Alley, Kohistan Street, Kitab Square, Saadat Abad, Tehran

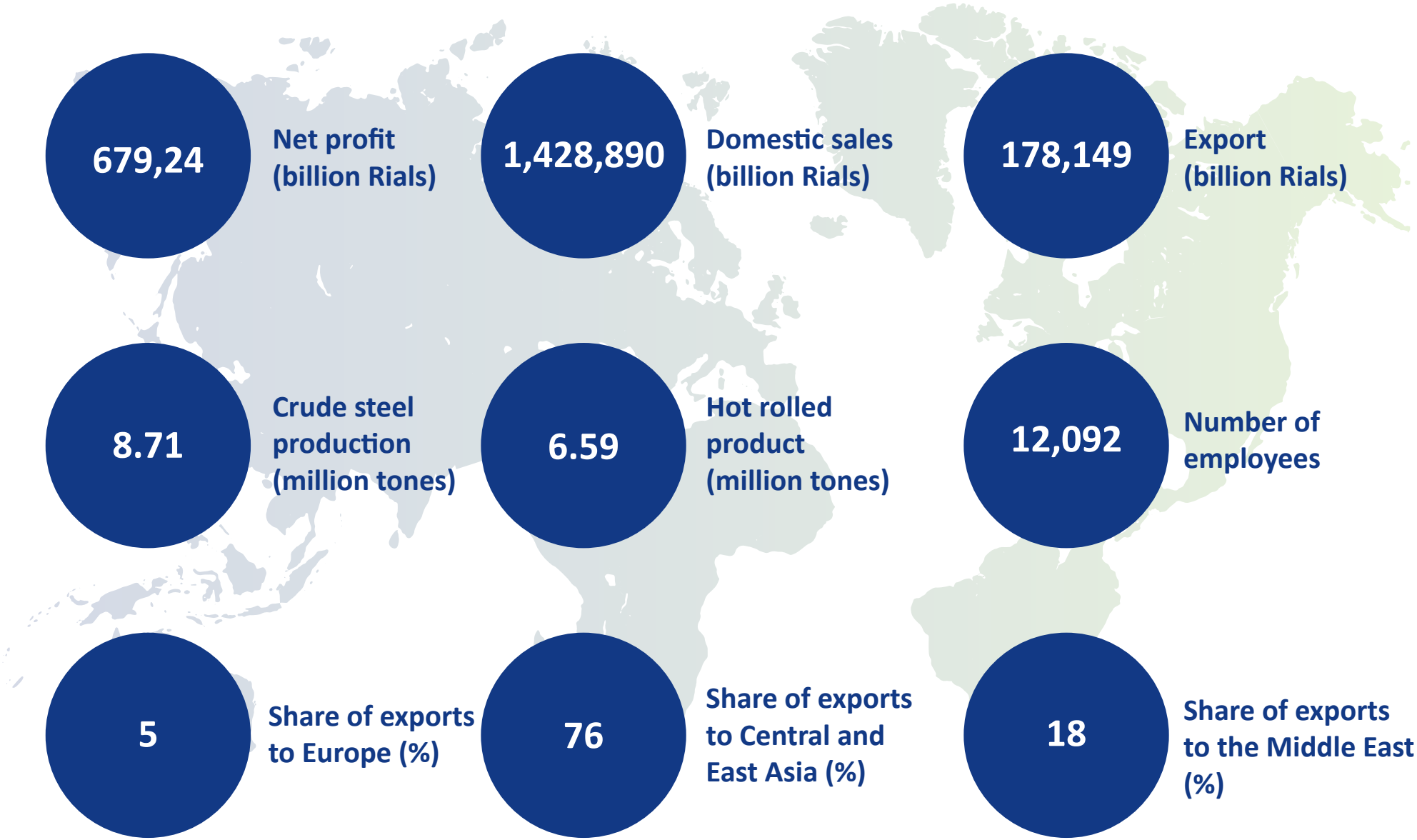

## Website:

www.msc.ir

# MSC's value creating system



# Our performance in 2022



# MSC affiliate companies

- **MSC Engineering** 99.24%
- **Felez Tadarok Co.** 99.90%
- **TAMCO** 37.7%
- **TUKA Foolad Investment Holding (22 Companies)** 52.57%
- **Mines & Metals Development Investment Co. (MMDIC)** 50.34%
- **Amin Teb Sepano Co.** 83.95%
- **Hormozgan Steel Co.** 95.21%
- **Foolad Sang Mobarakeh Co.** 99.19%
- **Chaharmahal & Bakhtiari Sheet Metal Co.** 93.7%
- **MSC Technology & Innovation Development Co. (MSTID)** 99.9%
- **Atieh Foulad N. J. Co** 28.75%
- **Setorg Steel Co.** %31
- **Metil Steel Co.** 69.93%
- **International Systems & Automation Engineering Co. (IRISA)** 75.29%
- **Foolad-e Mobarakeh Sepahan Sports Co.** 95%
- **Chadormalu Mining and Industrial Co.** 10.99%
- **Ardakan Novin Electrode Co.** 37.54%
- **Isfahan Water Supply Co.** 41.56%
- **Sangan Mining Industries Co.** 99.99%
- **Seid Dasht Steel Complex** 64.99%
- **Gol Gohar Mining and Industrial Co.** 10.81%
- **Andimeshk Zagros Steel Co.** 25%
- **Industries & Mines Water Supply Co.** 20%
- **MSC Development Market Making Investment Fund** 69.9%

# MSC affiliate companies

**Sangan Steel Iron & Iron ore Co.**
99.60%

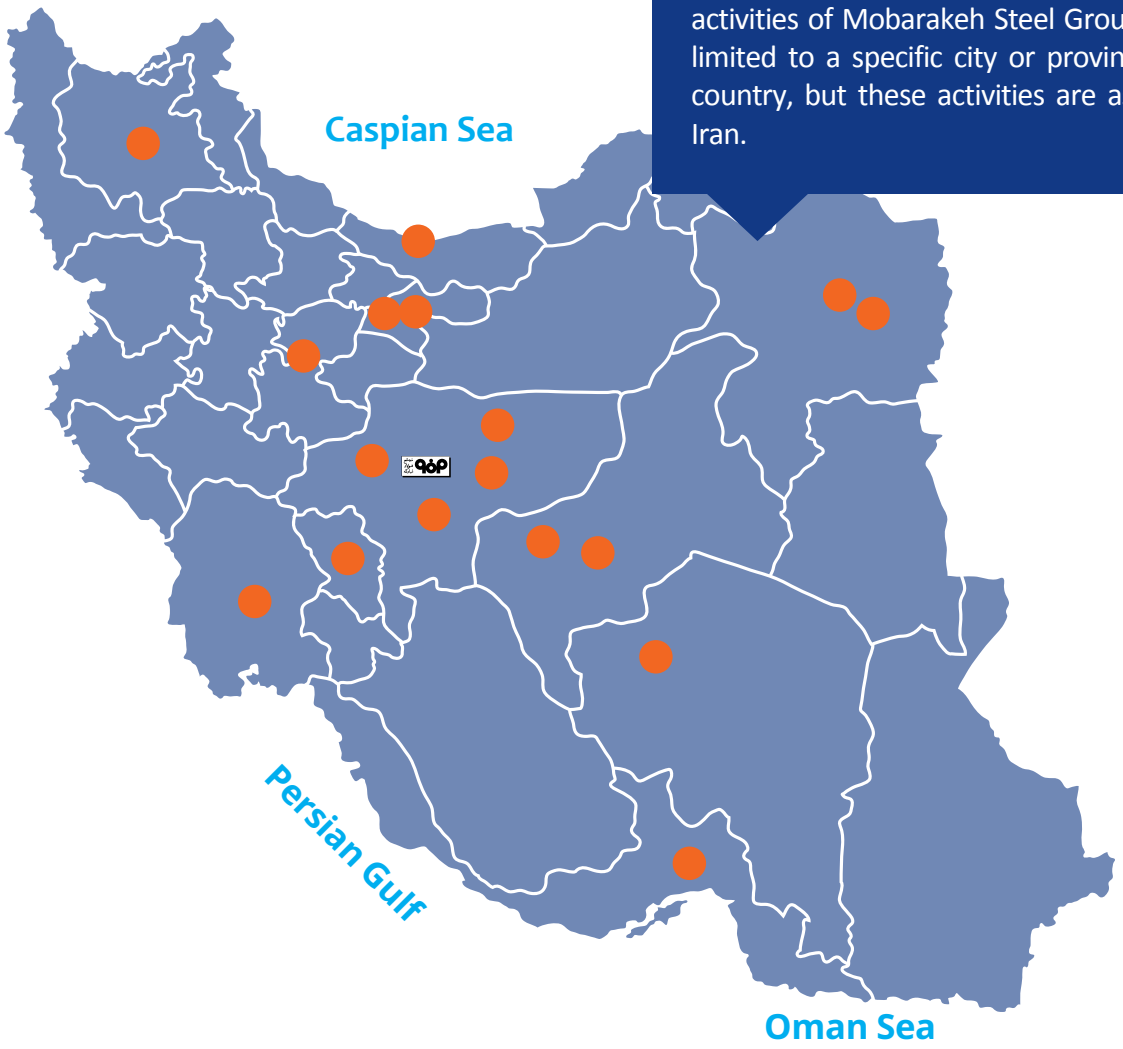
**Foolad Kavan Hami Iranian Co.**
60%

**Sepahan Novin Sports Co.**
95%

**Tavan Avaran Steel Industries Co.**
99.99%

**Nirou & Energy Pak Foolad Co.**
51%

**Paya Management of Mineral Resources Exploration Co.**
8.32%



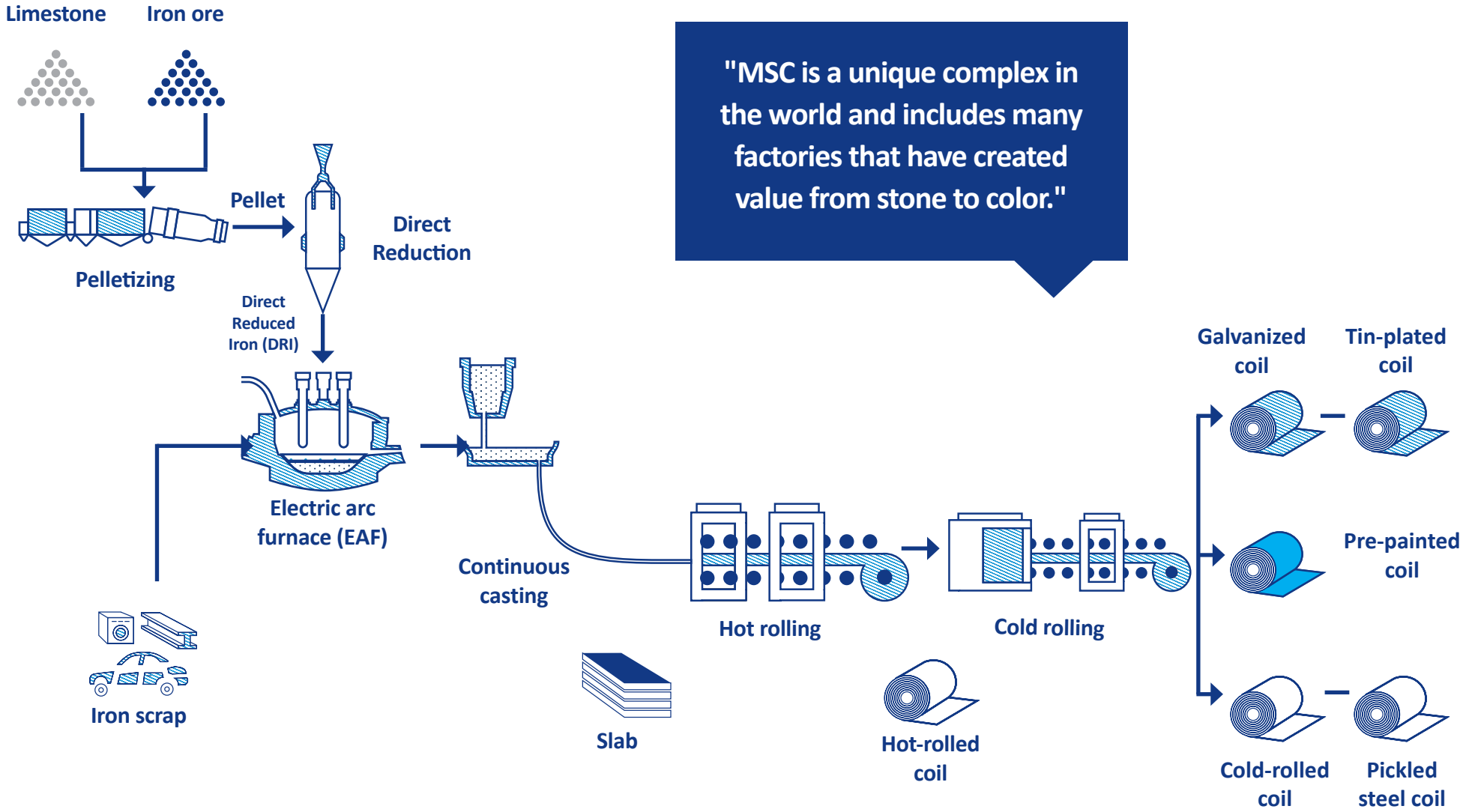

**MSC as wide as Iran**

The various production, service and economic activities of Mobarakeh Steel Group are not limited to a specific city or province of the country, but these activities are as wide as Iran.

# MSC shareholders

- 18.49% Semnan Province Investment Co.
- 5.38% Natural Person Shareholders
- 2.29% Retirement Fund for Bank's Personnel Ins.
- 23.42% Other Legal Shareholders
- 17.20% IMIDRO
- 2.49% Tejarat Bank
- 1.89% Behsazan Energy Tadbir Zangan Co.
- 10.85% Edalat Stocks (Direct method ownership)
- 2.41% Sadr Tamin Investment Co.
- 1.55% Shared Investment Funds
- 10.46% Refah Capital Development Co.
- 2.39% Social Insurance Fund for Farmers, & Villagers Nomads
- 1.17% MSC Development Market Making Investment Fund

# How do we make steel?



## Iron making

Iron ore powder used by the factory is supplied from the mines of Gol Gohar, Chadormalu, Bafq, Zarand, Sirjan Iranian, and Sangan complex located in provinces of Kerman, Yazd, and Khorasan Razavi through railways. Also, some part of the pellet required by the company is going to supply from Gol Gohar, Ardakan, and Sangan complex in the near future. Coarse-grained concentrate of iron ore with a purity of %67.5 turned into 16-8 mm pellets in 8 rotating discs after mixture with fine-grained iron ore concentrate, glue (bentonite powder), and sludge from duct collectors in the pelletizing unit. Pellets then are dried, preheated, baked in the furnace, hardened, and finally transferred to a direct reduction unit after cooling. In the next step, the oxide pellet is converted into direct reduced iron (DRI) with a minimum of %92 iron concentration (metallization) and %1.8 carbon. The DRI with a minimum of %92 iron concentration is taken out of the furnaces, stored in special silos, and finally transferred to the steelmaking area.

## Steel making and continuous casting

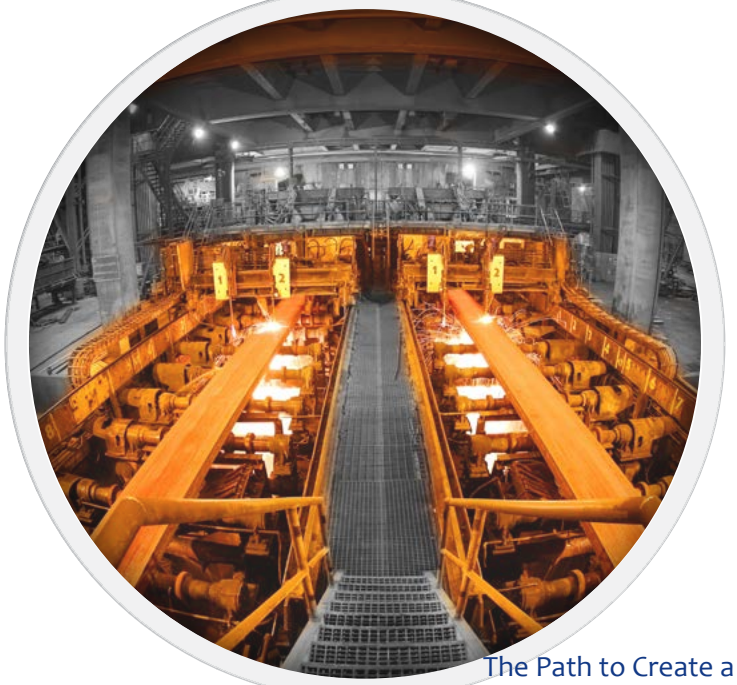
The steelmaking area has eight electric arc furnaces, each with a nominal capacity of 200 tons, capable of producing molten steel. The metal charge ratio in MSC's arc furnaces is a maximum of 10% scrap and 90% DRI, which is changeable depending on the conditions of the organization and the market. The DRI and scrap iron turn into molten steel in electric arc furnaces. The molten steel produced at this stage is transferred to casting machines and converted to steel slabs.

## Hot rolling

The slabs are transferred to the hot rolling unit after cooling. In this unit, they are reheated and rolled through different stages to produce coils with a thickness of 1.5 mm to 16 mm. The hot rolling production line turns the slabs with a thickness of 200 mm into hot coils according to the customers' demands.

## Cold rolling

The product is then sent to the cold rolling unit for complementary operations and thickness reduction up to 0.18 mm. It is then packaged in the form of coil and sheets and supplied to domestic and international markets. Some part of the products is converted into galvanized, pre-painted, and tin-plated coils in other units.

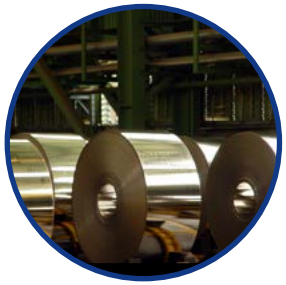


# Products and their applications

### Hot-rolled steel and pickled steel coil

Re-rolling, pipes and profiles for construction and manufacturing of machineries, fluid transfer pipes, pressure vessels, containers and storage tanks for liquefied petroleum gas, offshore structures, building structures, vehicle chassis, and tensile products

### Tin-plated steel coils



Food packaging industries, chemical packaging industries

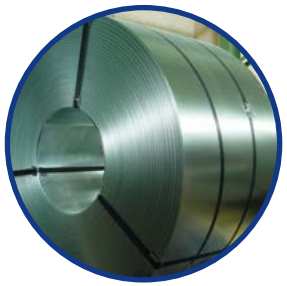
### Cold-rolled steel

Visible and invisible surfaces of automobile body and related parts, home appliances, light weight pipes, radiators, barrels, glazing, electrical industries, tensile products, light industrial structures

### Pre-painted Coil

Construction, home appliances

### Galvanized steel coil



Construction, home appliances, automobiles

### Checker plate Coil

Offshore Industries, vessels, Industrial Stairs, locomotive wagons, and automotive industry

# A message to stakeholders

We have not only thought about the development of our business, but also about the development of the local communities around us, and finally our country, since the establishment of the company. In fact, this belief led to the birth and development of MSC. The goal of the founders of MSC has been to make the country a better place to live, and since then, by drawing a broad vision, they have had in mind the creation of a better future for the people of the society. But we also believe strongly in this view, that our role is broader than the production of steel. As one of the largest producers of steel products in the region, we know that we have an influential position in the local and national economy. Indeed, our growth is linked to development of society around us and we take this responsibility with a great deal of seriousness.

In our purpose (management philosophy), we put "creating a better future" because we believe that the future has no meaning without the steel that is embedded in our lives. But to achieve a brighter future for all, it is essential that each be responsible and take the difficult path but with clear objectives. This responsibility and commitment to follow this path has been accepted by MSC and it will continue to do so. In this regard, this company has been accepting and listening to the concerns of its stakeholders and has understood their concerns well. In this respect, our commitment is evident by focusing on consumption management and optimal use of water and energy resources. In response to the concerns of local communities and the challenges of water scarcity, we have taken important steps towards managing this valuable and vital resource through different plans. In this regard we invested in water recycling and the waste water network of the surrounding cities and the treatment and reuse of this waste water in the production process which have led to a significant reduction in water consumption from non-renewable sources.

While in 2022 we faced serious challenges, such as cyber attack, but have succeeded in overcoming them and taking the necessary steps towards building a better future, thanks to our human capitals and technical staff's determination and commitment. It is worth saying that we are grateful to the employees as our companions in the path of creating a better future, and we have tried to pave the way for their growth and progress by creating a safe, healthy and cheerful work environment. In addition, we did not forget the support of local communities in this year due to our commitment as a responsible company, and in natural disasters such as the Khoy earthquake and the siege of people in the snow in the province of Chahar Mahal and Bakhtiari, we were among the first entities and organizations to help and we sympathized with our compatriots. This year, in order to move in the direction of responsible business and pay attention to knowledge-based and start-up companies, we had a special focus on digital transformation and smartization as well as innovation, and we took significant actions in this field and held important events.

And the future. We have developed strategies to create better futures for our stakeholders, one of which is "sustainable development (environmental, social, governance and economic)". To realize this strategy, we have formulated a sustainability framework based on the ESG approach and determined our sustainability focus areas based on it. One of our areas of focus in this field is the use of clean and renewable energy, and in order to realize that, we have made appropriate investments for the construction of solar and wind power plants. On the other hand, by planning to use the capabilities of the 4th industrial revolution and modern technologies, we seek to improve performance and productivity in our organization.

Finally, we tell you, dear stakeholders, as a responsible company, we will do our best to create a better future, and we deeply appreciate your trust and continuous support, and we look forward to continuing our ineffaceable journey together.

**Mohammad Yaser Tayebnia**
**CEO of MSC**

**“At MSC, we rely on committed and expert human resources, new techniques and approaches in order to move towards a better future for our stakeholders.”**

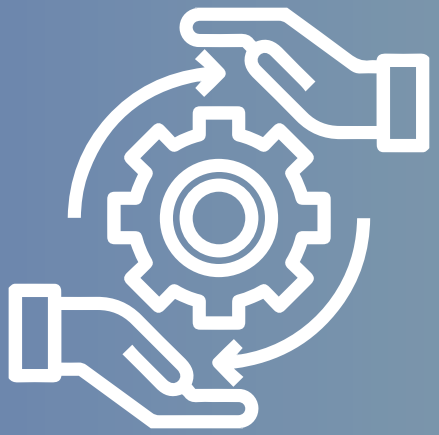
# About this report

We at MSC have drawn a path towards a better future based on our purpose (management philosophy) and we are trying to make this path ineffaceable with our actions and approaches in the field of sustainability and according to the needs and expectations of our stakeholders in addition to reaching the final destination. For this reason, the name "The Path to create a better future" was chosen for the sustainability report of MSC in 2022. This report depicts the environmental, social, governance and economic actions and performance of MSC in this path to achieve a better future.

In this report, according to the ESG framework developed in the company, the materiality analysis has been done in more depth, and in addition to determining the focus areas of sustainability (material issues), sustainability goals have been determined in each of the issues. We have tried to make changes in the structure, content, as well as the appearance and visual composition of the report compared to last year's report in 2021 entitled "Steel in the flow of life". This report has been prepared and compiled according to GRI standards and has followed its principles. Also, this report presents the performance of MSC in the environmental, social, governance and economic fields according to the material issues and based on the Core approach.

This report is the third sustainability report of MSC since 2018, and we try to report our performance in this field to the stakeholders every year. The data presented in this report are based on the sustainability performance of MSC and Saba Steel Complex (MSC's another steelmaking site) and belong to the financial year ending on 2022.

Our report can be downloaded through the company's official website (www.msc.ir). Stakeholders who wish to provide feedback on this report can express their opinions and suggestions using the communication channels introduced at the end of this report.



# Path of sustainable governance

**“MSC has chosen the path of sustainable and transparent governance to manage its business in order to achieve the vision and goals of the organization”**

# ESG in MSC

## Sustainability Framework

In order to better navigate its way to a better future, as well as in line with its purpose and strategies, MSC considers itself committed to moving towards creating a sustainable development and has tried to create a structure, framework and definition of focus areas in the field of sustainability and ESG. For this purpose, MSC has formulated its sustainability framework. In this framework, sustainability focus areas (material issues) in environmental, social, governance plus economic (ESGE) categories have been determined by sustainability working groups and the goals and actions of each area have also been defined.

# ESGE focus areas

| | Focus areas | Sustainability goals |
|---|---|---|
| Environmental | Water management | Reduction of fresh water withdrawal |
| | CO2 intensity | Reducing CO2 emissions in order to achieve zero emmision steel |
| | Air pollutant emissions | Reducing emissions of pollutants into the air |
| | Energy management | Energy saving |
| | Circular economy | Development of circular economy |
| | Using clean and renewable energy | Providing part of the company's energy needs from renewable energy sources |
| Social | Health and safety of employees | Creating safety leadership capability at all levels of the organization to achieve zero injury |
| | | Improving the industrial safety and health of contractors |
| | | Establishment of process safety management system |
| | | Improving the quality of services and supporting health programs for employees and dependents |
| | Interaction with the community | Improving the social position of the company in society |
| | Supporting local communities | |

# ESGE focus areas

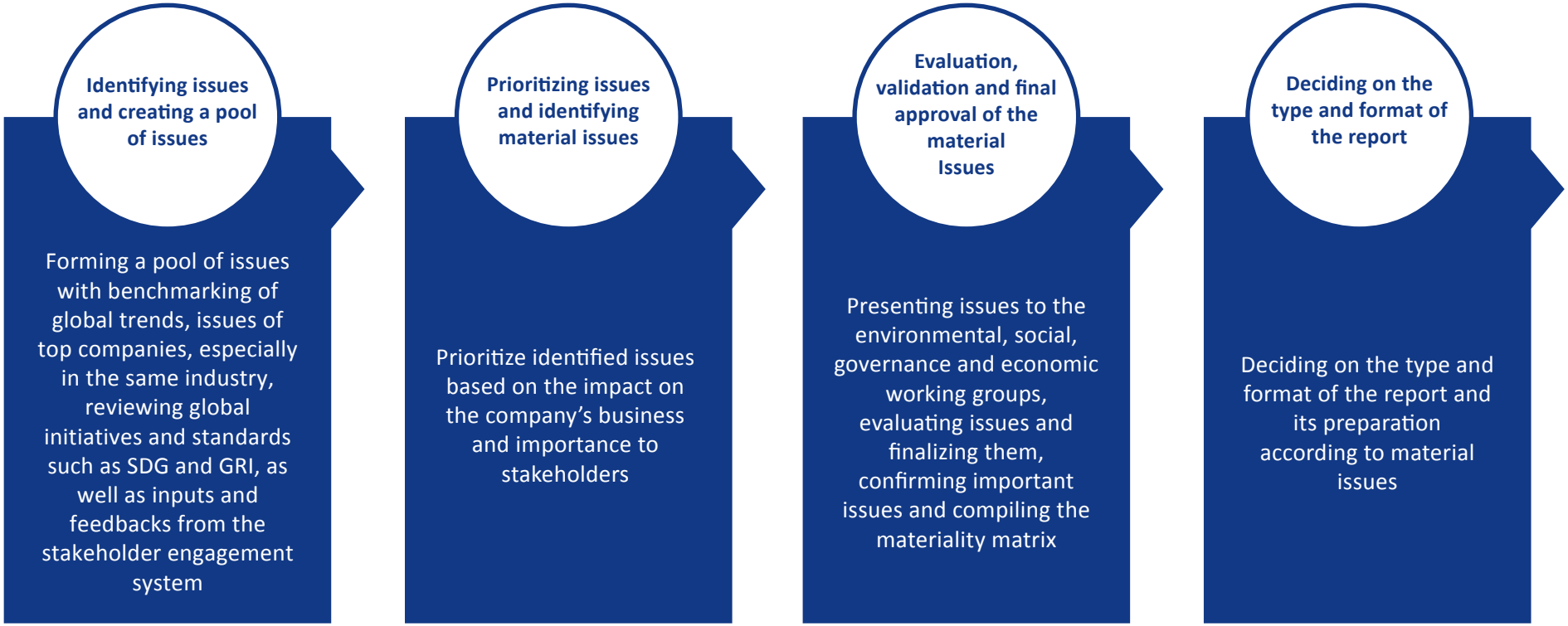
| | Focus areas | Sustainability goals |
|---|---|---|
| Governance | Ethics, transparency, good governance | Promoting the position of transparency among IMI100 companies |
| Governance | Innovation in technology and product | Development of innovation ecosystem |
| Governance | Innovation in technology and product | Development of innovative steel products |
| Economic | Responsible economic performance | Improving responsible economic performance |
| Economic | Responsible economic performance | Concistency of profits |

In order to focus ESGE, four environmental, social, governance and economic working groups were formed. These working groups determined sustainability focus areas by identifying and assessing stakeholder needs and expectations, global trends, global initiatives and standards such as SDGs and GRI as well as sustainability focus areas of worldclass companies. In addition, in the meetings of these working groups, sustainability goals related to focus areas were determined.

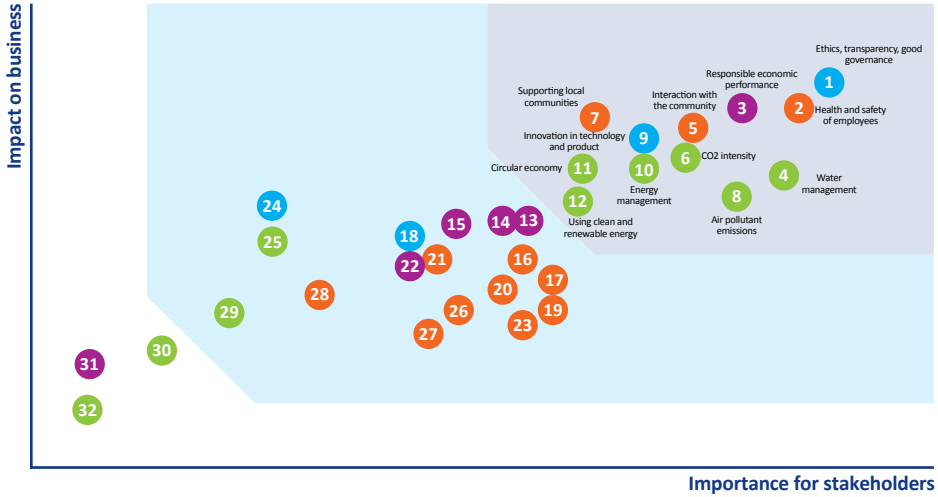
# Materiality analysis

The materiality analysis started with the creation of a pool of issues based on global trends, issues of top worldclass companies, especially in the same sector, review of global initiatives and standards such as SDG and GRI, as well as input and feedback from the stakeholder engagement system, in order to compile the MSC Sustainability Report. Then the topics were prioritized and key and material issues were extracted. Finally, the format and type of sustainability report was selected and approved in order to compile it after confirmation of these issues.

An issue pool containing 74 topics was set up to identify material issues. After the initial screening of the issues, a total of 32 issues were determined for final prioritization using the two criteria of "importance for the stakeholders" and "impact on the business". Finally, 12 material issues were determined as MSC's sustainability focus areas (strategies).



# Materiality matrix




| Material issues | | International initiatives and standards | |
|---|---|---|---|
| | | GRI | SDG |
| 1 | Ethics, transparency, good governance | GRI 205 | |
| 2 | Health and safety of employees | GRI 403 | SDG 3 |
| 3 | Responsible economic performance | GRI 201, 203 | SDG 8 |
| 4 | Water management | GRI 303 | SDG 6 |
| 5 | Interaction with the community | GRI 413 | SDG 11 |
| 6 | CO2 intensity | GRI 305 | SDG 11, 13 |
| 7 | Supporting local communities | GRI 413 | SDG 11 |
| 8 | Air pollutant emissions | GRI 305 | SDG 11, 13 |
| 9 | Innovation in technology and product | | SDG 9 |
| 10 | Energy Management | GRI 302 | SDG 7 |
| 11 | Circular economy | GRI 306 | SDG 12 |
| 12 | Use of clean and renewable energy | GRI 302 | SDG 7 |

## Material issues

**E**

- 4 Water management
- 6 Intensity of CO2 emissions
- 8 Air pollutant emissions
- 10 Energy Management
- 11 Circular economy
- 12 Use of clean and renewable energy
- 25 Material efficiency
- 29 Sanitation of drinking water and food
- 30 Environmental management system
- 32 Biodiversity

**S**

- 2 Health and safety of employees
- 5 Interaction with the community
- 7 Supporting local communities
- 16 Training and development of human capital
- 17 Quality of life and work-life balance of employees
- 19 Organizational justice and equal opportunities
- 20 Providing consistent livelihood for employees
- 21 Training and development of people with the potential to attract in the future
- 23 Community health
- 26 Interaction and communication with employees
- 27 Employment
- 28 Hiring competent human resources

**G**

- 1 Ethics, transparency, good governance
- 9 Innovation in technology and product
- 24 Risk management
- 18 Digitization and smartization

**E**

- 3 Responsible economic performance
- 13 Protecting the rights of shareholders
- 14 Increase customer satisfaction
- 15 Variety of product portfolio
- 22 Shared growth with business partners
- 31 New business investment

# Stakeholder engagement

Stakeholders are our companions on the path of sustainability, and as much as they are worried about going the right way, we are also worried and concerned. This is why the stakeholders and their needs, expectations and concerns are of great importance to us at MSC. A major and significant element in our stakeholder engagement system, as well as the feedback they provide to us by means of a number of mechanisms, is their expectations and concerns. Our strategies will be drawn from these inputs at organisational level. We have developed a six-step model based on the AA1000 standard as well as the 2020 EFQM excellence model to engage with stakeholders, and we have started implementing it since 2020. In the first step of this model, the stakeholders are identified and categorized. In the second step, the stakeholders are prioritized based on the criteria of " stakeholder interest" and " stakeholders power" and then, the needs and expectations of the stakeholders are identified. In this step, we try to actively identify the needs, expectations and perceptions of the stakeholders and consider their future concerns in the current decisions. In the fourth step, the needs and expectations of the stakeholders are prioritized based on the criteria of "impact on the company" and "importance for the stakeholder", and then we formulate the SEP (Stakeholder Engagement Plan) and respond to their needs and expectations at different levels. In the last step, the performance of the company in meeting the needs and expectations is evaluated, as well as the process of engagement with the stakeholders in terms of the appropriateness and adaptation of the purpose and scope. In addition, the stakeholder engagement plans are also evaluated and the stakeholders are surveyed in this regard.

# MSC's key stakeholders

## Shareholders

**Why this stakeholder group is important to us:**
They are the owners of the company

**How we engage with them:**
- Extraordinary General Assembly and Annual General Assembly
- Approvals and minutes of the General Assembly
- Board meetings
- Office correspondence, telephone, fax and email
- Survey
- Face-to-face communication (in person and meetings)
- Stock exhibitions
- Company website
- Social media

**What are the key topics of engagement:**
- Improving economic performance (profitability, production and export)
- Maximum distribution of cash profit
- Timely and effective implementation of development plans
- Provide clear, accurate and timely information and reporting
- Attention to the principles of sustainability and social responsibilities
- Using expert managers in the board of directors and key jobs of companies
- Variety of response channels with a focus on electronic channels

## Customers

**Why this stakeholder group is important to us:**
They give us the opportunity to build mutually beneficial long-term relationships, and meeting their expectations is the foundation of our business success.

**How we engage with them:**
- Customer Relationship Management (CRM)
- Survey
- Visiting customers' sites and vice versa
- Holding technical and business meetings
- Holding joint exhibitions and conferences
- Claims, complaints and other customer feedback
- Office correspondence, email, phone and fax
- Social media
- Technical booklet/brochure/catalogue
- Collaboration/joint project

**What are the key topics of engagement:**
- Quality of products
- Timely delivery
- Flexibility in terms of financial payment
- Competitive price
- Stability of supply
- Production of special products
- Responsiveness and continuous communication
- Providing technical guidance and recommendations

## Suppliers

**Why this stakeholder group is important to us:**
They provide raw materials and services vital to the production and continuation of our business.

**How we engage with them:**
- Face-to-face meetings and visits to suppliers' sites
- Official correspondence, email, phone and fax
- Supplier Relationship Management (SRM)
- Survey
- Attending exhibitions and conferences
- Holding a conference for suppliers
- Social media
- Steel newsletter

**What are the key topics of engagement:**
- Developing a sustainable relationship
- Proper communication and interaction with company managers
- Timely payment of bills

# MSC's key stakeholders

## Society and legal entities

**Why this stakeholder group is important to us:**
The social and legal license of our activity depends on creating value for society as well as effective engagements based on rules and regulations with them and legal entities.

**How we engage with them:**
- Legal requirements and standards
- Correspondence and official requests
- Face-to-face meetings and agreements
- Reports
- Conferences and exhibitions
- Survey
- Steel newsletter
- public media
- website
- Social media
- Press conferences

**What are the key topics of engagement:**
- Improving economic performance (profitability, production and export)
- Compliance with rules and regulations
- Transparency and accuracy in providing information
- Optimal use of energy sources and carriers (water, natural gas)
- Management of pollutant emissions
- Optimal waste management
- Using renewable energy and new technologies to reduce carbon emissions
- Supporting and providing the maximum needs of the downstream industries of the province
- Playing a role in national and regional development
- Providing economic and development achievements
- Providing assistance in line with social responsibilities
- Compliance of activities with legal requirements
- Transparency and accountability

## Employees

**Why this stakeholder group is important to us:**
Employees are the key to the success of our business. Their efforts are instrumental in realizing our strategies and goals and for the growth of our business.

**How we engage with them:**
- Joint meetings with leaders, managers, bosses and supervisors
- Correspondence, phone calls and in-person referrals
- Employee performance management system
- Survey
- Social networks and systems (such as the employee portal, My Steel app.)
- Steel newsletter
- Complaints system
- Educational and consulting services

**What are the key topics of engagement:**
- Improvement of living conditions and welfare
- Effective development of succession system
- Continuous improvement of safety and health of employees and working environment conditions
- Providing appropriate and effective training
- Notification of important and related events and news
- Establishing communication channels between MSC and retirees
- Establishing a balance between responsibility and authority and compensation for services
- Improving the incentive and compensation system according to performance, competence and organizational position and job responsibility
- Solving pension fund problems
- Establishing the work-life balance of employees

## MSC Group companies

**Why this stakeholder group is important to us:**
MSC Group companies are members of our family.

**How we engage with them:**
- Meetings and visits
- Board members and audit committees of companies
- Office correspondence, email, phone, fax and social media

**What are the key topics of engagement:**
- Developing strategic direction and holding meetings to align company goals and strategies
- Sharing knowledge and management skills at the level of group companies
- Integrated salary payment system at the group level
- Using expert managers in the board of directors and key jobs of companies
- Stable supply of raw materials and consumables

# Corporate governance

Systematic administration of affairs has been one of the success factors of MSC in recent years, and the systematic and transformational structure has created a solid framework for organizational governance in the company. In this framework, company managers determine a clear and shared vision and provide the necessary support to guide, coordinate and align employees. The governance structure of the company includes members of the board of directors, CEO and members of the council of deputies. In fact, MSC has a functional organizational structure including deputies and their sub-units, and all processes and activities are implemented based on this structure. Besides that, the transformation structure has been created to effectively manage the continuous improvement cycle.
The highest decision-making body of the company is the General Assembly. Also, the highest governing body of the company is the board of directors of the company, which consists of five members and their term of office in the company is two years.

## Legal environment of the company

The most important laws and regulations governing the company's activity are:
a) National laws and regulations (including: Trade Law, Labor and Social Security Law, Direct and Indirect Taxes Law, Securities Market law for companies accepted in Securities and Exchange Organization, Mercantile Exchange Law and Development and New Tools and Financial Institutions Law).
b) Environmental laws and regulations.
c) Approvals and regulations within the company (including: the company's charter and internal regulations, the company's financial and trading regulations, general assembly approvals, board of directors approvals).

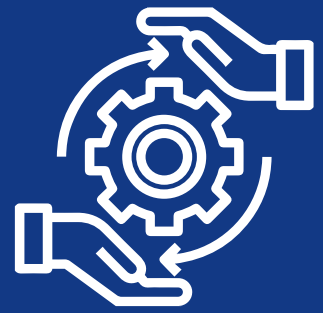
## Legal ownership

MSC Company (MSC) (public joint stock company), which is now one of the largest industrial companies of the Islamic Republic of Iran, was registered as a private joint stock company with registration number 7841 in Isfahan Companies and Industrial Property Registration Department on 19 March, 1991. According to the minutes of the extraordinary general meeting dated 10 May, 2004, the company was converted from a private stock to a public stock and on 26 February, 2007 its name was included as the 435th accepted company in the list of listed companies.

## Board of Directors

At MSC, the board of directors is known as the highest governing body of the company. Board members are elected once every two years from among the shareholders. The selection of these people is mandatory through obtaining the votes of all the shareholders, and the voting must also take place in the general assembly meeting, and in this way, the shareholders are involved in the selection of the highest governing body. In this election, one or more members of the previous board must be removed from their positions. New members should also be selected through elections. The selection of other official and legal officials should also be done through voting, like the members of the board of directors.

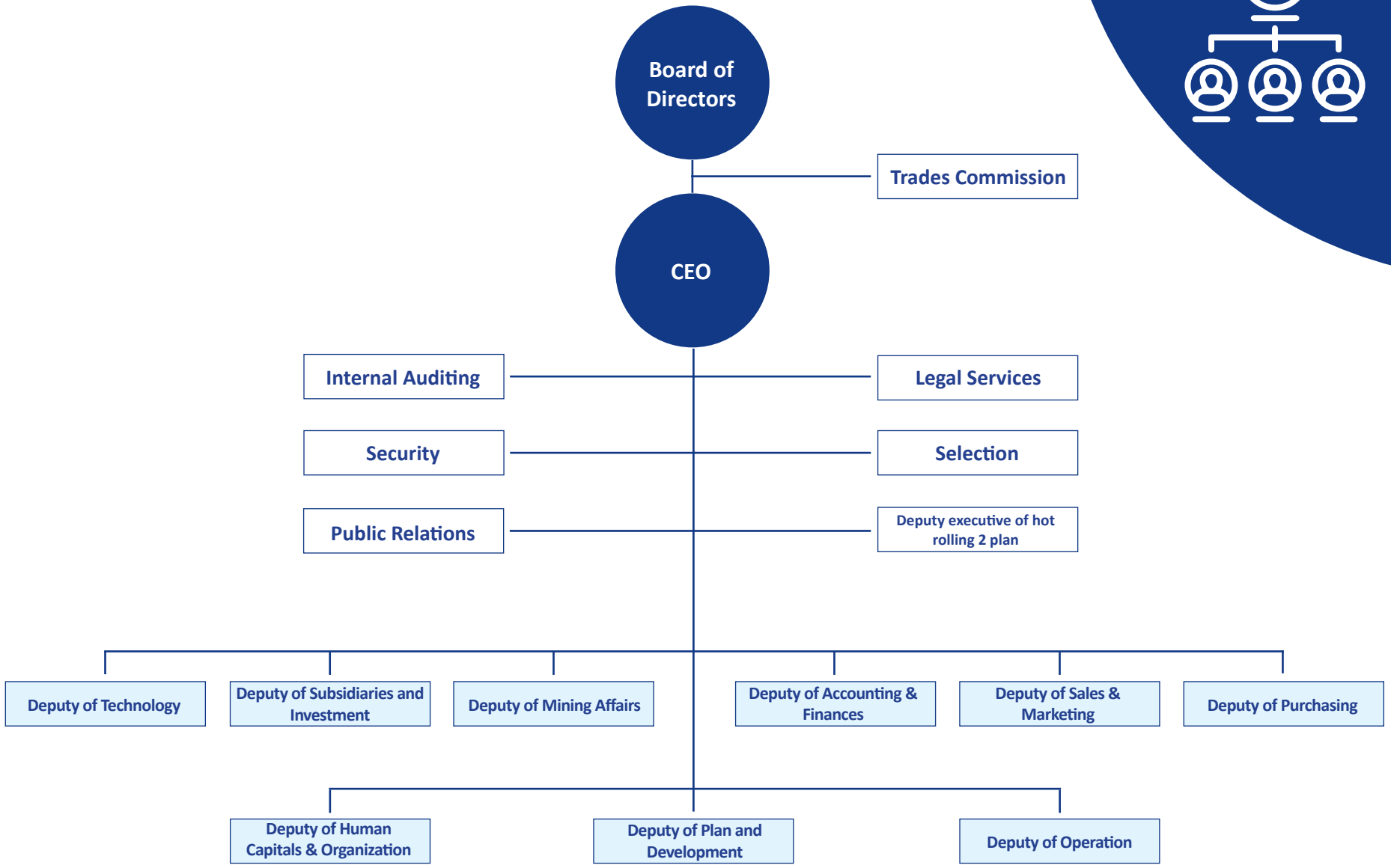
# MSC's policies related to corporate governance



The purpose of corporate governance is to help the policy makers of the company in evaluating and improving the legal, regulatory and institutional framework for corporate governance with the aim of supporting the effectiveness, efficiency, sustainable growth and financial stability of the company. To move in the direction of sustainability it is necessary to establish a corporate governance system, to have strategic and operational planning, to create an effective and efficient control environment and to have an integrated risk management culture in the company while committing to ethical principles and values. In this regard, the company has designed and implemented approaches to ensure the effective implementation of corporate governance.

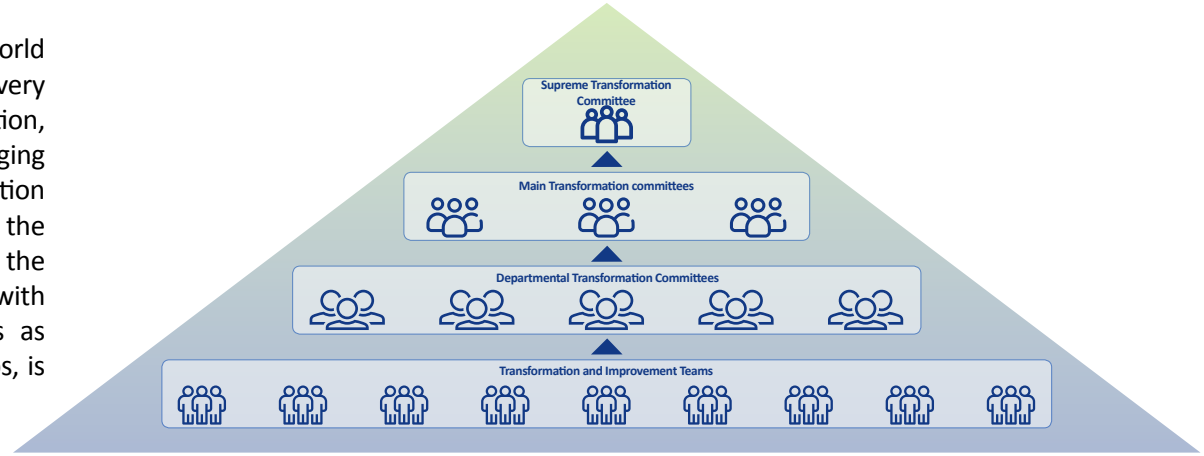
| Principles of corporate governance | Company approaches |
|---|---|
| Principles and framework of effective corporate governance | Compliance with the requirements of Chapters 2 and 3 of the Corporate Governance Guidelines |
| Protecting the rights of shareholders and treating them equally | Compliance with the provisions of 240 of the Commercial Law regarding profit sharing<br>Compliance with the disciplinary instructions of the publishers accepted in the stock exchange |
| Compliance with the rights of beneficiaries | Compliance with the provisions of Article 129 of the Commercial Law regarding transactions with related parties |
| Institutional investors, stock market and other financial intermediaries | Compliance with the instructions of the stock exchange organization<br>Compliance with the instructions of the commodity exchange |
| Accountability, disclosure and transparency | Complying with the executive instructions for disclosing information of companies registered with the Stock Exchange Organization<br>Compliance with the disciplinary instructions of the publishers accepted in the stock exchange organization<br>Implementation of provisions articles 37 and 38 of chapter five of corporate governance guidelines<br>Disclosure of information and financial reports on the company's website |
| Responsibility of the board of directors | Compliance with the requirements of chapter three of the corporate governance guidelines<br>Compliance with the provisions of 27 to 44 of the company's statutes |

# The organizational structure of MSC



# MSC transformation structure

Considering the competition in the current business world and in order to increase the competitive advantages, every organization needs to manage and implement transformation, for this purpose MSC has created a platform for managing the cycle of continuous improvement in the organization through the comprehensive transformation system. In the transformation structure of MSC, the highest institution is the "Supreme Transformation Committee", which, together with the main and departmental transformation committees as well as transformation and improvement teams and groups, is responsible for continuous improvement management.




MSC transformation structure

The main transformation committees are:

| Name of committee | Name of committee | Name of committee | Name of committee |
|---|---|---|---|
| Iron making | Central workshop | Communications and social responsibilities | Technology |
| steel making and continuous casting | Central maintenance | Design and development | Investment and corporates affairs |
| Hot rolling | Transportation and support | Human capital management and organization | Planning and production control |
| Cold rolling | Technical inspection, automation and instrumentation | Purchase and suppliers | Mining affairs |
| Saba steelmaking and continuous rolling | Maintenance technical office | Sales & marketing | Accounting and finances |
| Energy and fluids | CEO area | | |

# MSC strategic management process

The strategic management process in MSC is a five step process carried out every year through meetings with the full participation of leaders (including CEOs, deputies, and managers) and employees at different corporate levels.

**Step 1**

This step is allocated to the identification and analysis of the needs and expectations of stakeholders, review/ validation of the statements of existing philosophy, mission, vision, and strategic objectives, review/ validation of organizational values, analysis of the macro-environment, analysis of industry environment, and analysis of internal environment. The core strategy of the company
is compiled/revised after development of the SWOT-BSC matrix.

**Step 2**

The BSC (Balanced Scorecard) approach is used for effective translation of the strategy, and the business-level strategy plan is developed/ revised in alignment with the corporate mission and vision. The key performance indicators (KPIs) and strategic initiatives are defined after formulating the strategic objectives. Scenario planning is carried out for variables under uncertainty conditions, and the strategic risks and opportunities are identified and managed to increase the probability of strategy success.

**step 3**

Functional-level strategic maps are developed with the participation of leaders and members of the main transformation committees (22 committees) in line with the business-level strategy map to cascading execution of strategies and strategic objectives at different corporate levels and to ensure organizational alignment.
In this step also the key performance indicators and strategic initiatives are defined at main transformation committee level. Besides, key performance indicators and related strategic initiatives are developed for departmental transformation committees (over 136 committees) in alignment with the strategic map of the main transformation committee

**Step 4**

In this stage, the strategies and plans of the business The core strategy and business-level and functional-level strategic maps formulated in steps 2 and 3 are e through processes, structures, and managerial and collaborative systems. MSC also uses the Comprehensive SEM System for effective management of its strategy and continuous monitoring of the key indicators and strategic initiatives.

**Step 5**

The realization of strategic objectives and the progress of strategic initiatives are monitored in this step over monthly periods while also performing quarterly evaluations. The results of the evaluations are analyzed in the transformation committees in the form of various reports (such as the evaluation report of strategic objectives and initiatives, the performance evaluation report of the transformation committees, etc.).

# Smart strategic management

## Strategic observatory and future research

MSC has created a strategic observatory and future research in the form of a digital platform called **Didwan** application, with an approach of strategic intelligence and agility, looking at the near and far future. This intelligent observation platform has four sections: radar, news, statistics and information, and studio.

**Radar section**: As the heart of the Didwan Observatory, it is thematically arranged in six categories including technological, business, political, social, economic and environmental radars, and they provide the latest qualitative analyzes of distant time-places and macro-environments in the framework of environmental scanning. The most important goal of radar is to create a mental model-proactive learning in MSC.

**Statistics and information section:** The most important statistical indicators collected from reliable sources are indexed in this section. These statistical indicators are placed in the three categories of macroeconomics, steel industry and capital market, and they are the most important indicators that should be taken into account by managers in decision-making processes. In this section, indicators such as exchange rates, prices of basic metals, Tehran Stock Exchange Index, etc. are displayed.

**Studio section:** In this section, there are videos and podcasts about future-oriented concepts, trend analysis, industry analysis, or any other useful information for managers to make better decisions. The purpose of this section is to draw attention to the most important topics of the day in the form of an attractive video for a more appropriate audio and visual transmission to the viewer.

**News section:** provides the latest news related to the steel industry in the near time-places and of course international. These news are mostly about the current actions and future plans of the biggest steel companies in the world and to monitor the behavior of international competitors.

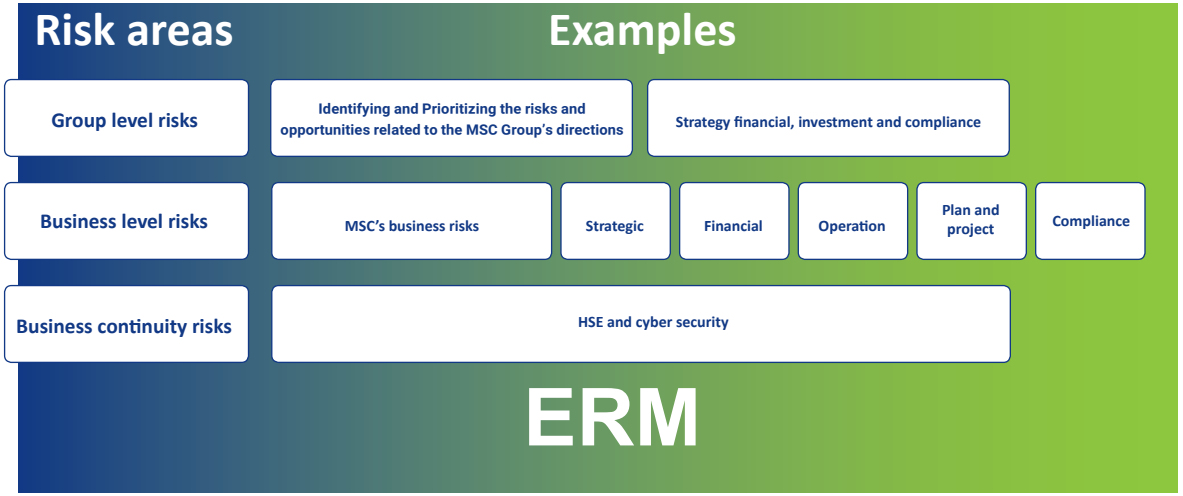
دیدوان
چشم همیشه باز مدیران

# Risk management

By learning from the ISO 31000 standard and the COSO risk management framework, MSC has designed its own Enterprise Risk Management System (ERM) and identifies, evaluates and manages the risks of group, business and business continuity levels. According to this approach, risks are identified and the procedures for dealing with them are determined at each level in accordance with the relevant workflows, and if necessary, they are re-evaluated to be transferred to the "Company Risk Steering Committee" and if the result of this evaluation is a high priority, then the risk management steering committee will pay attention to how to deal with that risk. For the effective management of risks and opportunities, the necessary preventive or contingency measures are identified and implemented, and the relevant indicators (KRIs) are regularly monitored for critical risks and opportunities. Also, in line with effective risk management in the company, a risk management system has been developed based on the ISO 31000: 2018 standard, the COSO (2017) framework, and in alignment with the policies of the audit committee and the corporate governance guidelines of Iran's Securities and Exchange Organization (SEO).

In each of the areas of the company's risk management model (ERM), the six main steps of risk management are implemented and its results are announced to the "Risk Steering Committee" according to the ERM approach if needed. "Risk Steering Committee" after examining the dimensions of the severity of that risk, decides to adopt related control measures.

MSC ERM model




Risk management steps

## Risks identified in 2022

- Constraints in sustainable supply of iron ore concentrate,high quality fine
- The impossibility of recovering and reducing the value of advance payments in case of non-fulfillment of suppliers' obligations
- Unstable quality of special products
- Providing some strategic and bottleneck items (such as iron ore concentrate, pellets, electrodes and special refractories) with lower qualities than the set standards
- Electeic power restrictions
- Continuation of the downward trend of prices in global markets
- Stricter environmental standards
- Impossibility of direct cooperation with international technology companies
- Limitation in providing and supporting software licenses and hardware equipment
- Limited ability and experience of internal contractors in implementing digital transformation projects
- Increasing number and complexity of cyber attacks
- Reducing the cooperation of manufacturers and producers with MSC in localization

## Opportunities identified in 2022

- Good demand for steel products to transfer fluids in the country (e.g. steel plates for sour gas transfering pipelines)
- The existence of capable and interested knowledge-based companies in the country, for the development of localization and technology of steel production lines.
- The presence of green technologies in the field of environment and optimal consumption of resources (water and energy)
- The possibility of using startups and owners of new ideas in the field of digital transformation
- The possibility of effective use of the succession system

# Path of responsible business

“We at MSC have taken a step in the path of responsible business with an innovative perspective and based on understanding the demands and expectations of the surrounding environment.”

# Environmental protection

As the effects of climate change become more tangible in people's daily lives, the most familiar interpretation of sustainable development to society is reducing the environmental impacts of development. Currently, reducing the consumption of non-renewable resources and exploiting renewable resources by creating the lowest cost for the environment has become especially important for the inhabitants of the earth, both individuals, companies and governments. As a leading business in the country's economy, MSC is trying to take a step towards realizing sustainable development by using all its resources, including previous experiences gained in facing challenges, expert human capital and new and effective technologies. Sustainable development requires the protection of the environment, which faces various challenges, requires the definition of effective strategies that are followed by well-defined operational goals and continuous evaluations and improvements. In this regard, MSC has determined its first five-year plan (MSC's first five-year environmental improvement program) to manage environmental effects in the period from 2022 to 2026. According to this program, improving the environment and minimizing the environmental footprint of the company are the main goals.

**The green path of sustainability**

## A strategic view of the environment

MSC was established with the purpose of a responsible company to create a better future, and one of its main approaches is sustainable development in all environmental, social, governance and economic dimensions. In MSC's value creating system, protecting the environment is one of the company's fundamental values. Accordingly, in all the decisions of the company and in each of its executive levels, attention to the environment is considered. Also, goals related to sustainable development, especially in the environmental dimension, are formulated and related measures are defined and implemented. Another sign of this attention in the company is that one of the main parts of the company's comprehensive code of conduct is dedicated to the environment, and the leaders and employees of company regulate their daily actions and behaviors in order to protect the environment.

**Purpose**

**A responsible company to create a better future**

**Strategic goal**

**Improvement of environmental performance**

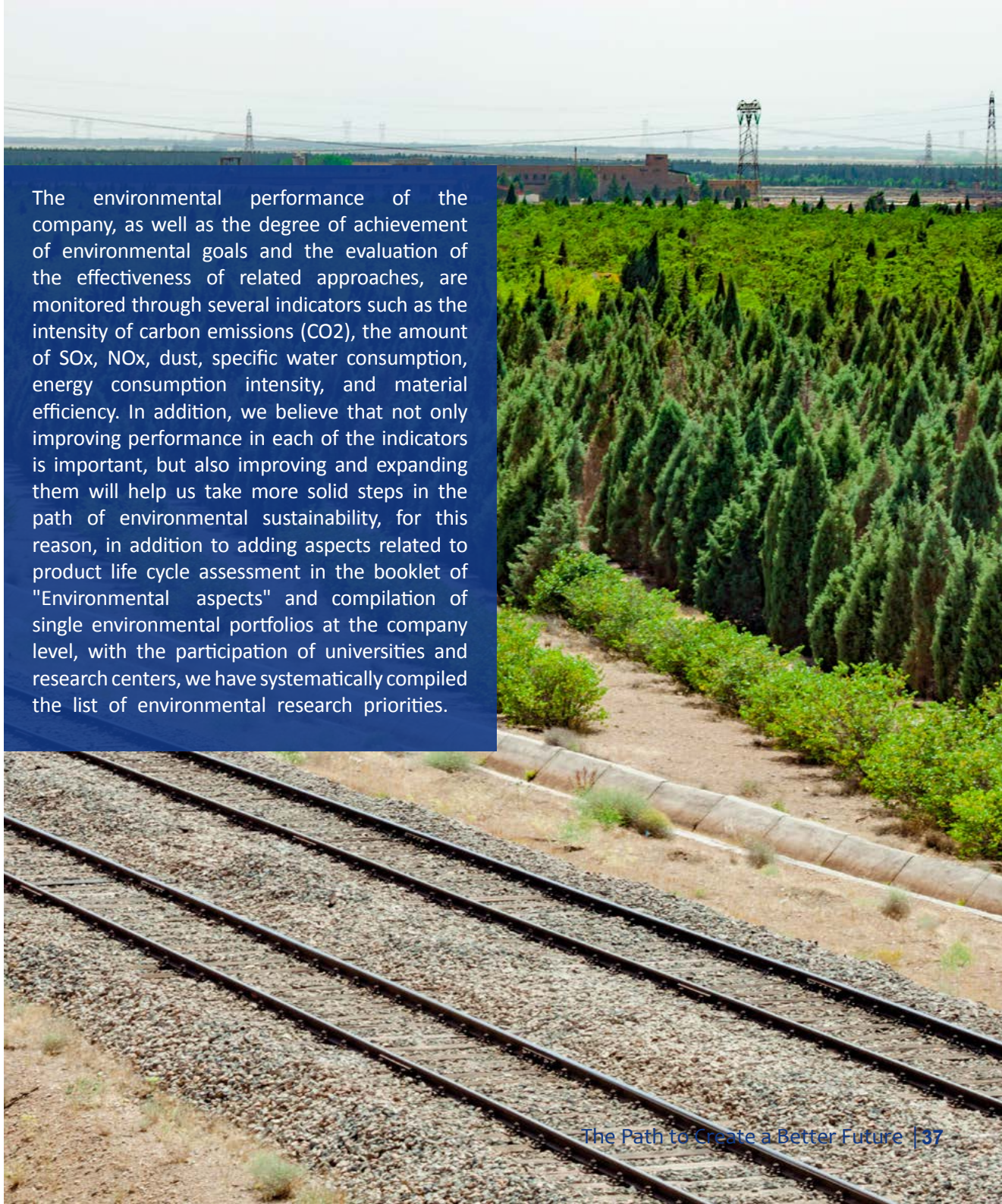
| | |
|---|---|
| **Environmental goals in the first five-year environmental improvement program (2022-2026)** | **-Comprehensive, coordinated and systematic management of water resources**<br>**-Reducing CO2 emissions in order to achieve zero carbon steel**<br>**-Reducing emissions of pollutants into the air**<br>**-Reducing the intensity of energy consumption**<br>**-Protecting biodiversity**<br>**-Management of by-products and achieving Zero waste** |

# Environmental management system

Considering the environment is one of the main chapters in the management system of MSC. The background to the performance of MSC shows that in the early years of the establishment, despite the development attitude in the country, the company, in line with the focus on the industrial development of the country and the main national policies in this regard, has also put environmental attention on its agenda, and as a result of this approach, MSC Since 1996, implemented its environmental management system and in March, 1997, as the first major industrial complex in the country, he has been recieved the ISO 14001 standard sertification. This omprehensive and future oriented approach has provided the opportunity for the company to join flows of sustainability before approaching crises. MSC currently has a systematic and multilateral approach to the issue that is, achieving sustainable development in the steel industry, is not considered to be one-sided, and sustainability depends on continuous improvement in different sectors.

The environmental management system in MSC is designed based on the ISO 14001 standard and includes all production, support and headquarters units. The functioning method of the environmental management system includes the identification, evaluation and prioritization of environmental aspects and internal and external audits, pollutant monitoring, implementation of SCADA plan in the field of environment, comprehensive management of waste and planning and implementation of improvement measures in line with them.

The environmental performance of the company, as well as the degree of achievement of environmental goals and the evaluation of the effectiveness of related approaches, are monitored through several indicators such as the intensity of carbon emissions (CO2), the amount of SOx, NOx, dust, specific water consumption, energy consumption intensity, and material efficiency. In addition, we believe that not only improving performance in each of the indicators is important, but also improving and expanding them will help us take more solid steps in the path of environmental sustainability, for this reason, in addition to adding aspects related to product life cycle assessment in the booklet of "Environmental aspects" and compilation of single environmental portfolios at the company level, with the participation of universities and research centers, we have systematically compiled the list of environmental research priorities.



# Protecting biodiversity

MSC is located 75 kilometers southwest of Isfahan and has an area of 35 square kilometers. This area has surface water in the form of spring runoff, regional well water, and pasture ecosystems of medium quality, and more than 300 species of pasture plants, including trees, shrubs, and perennial and annual plants, grow in this area. MSC has created a diverse ecosystem in this area by promoting plantations and preventing livestock grazing in this area.

## Green lungs of steel

### Creating and smart maintaining of green space

MSC, as a eco-friendly steel producer, in addition to its legal duty to create and intelligently maintain green spaces, has put the region's green lungs on its agenda, and for this purpose, it has taken the following actions:

•MSC, from its entire field, has 43% of it when the legal requirement is 25% of the total area It has been dedicated to planting trees and shrubs and creating a planting forest, and currently has about 1500 hectares of green space and forest, which has a significant impact on the control of pollutants and the prevention of the flow of dust to surrounding towns and residential areas.

•The conducted researches have shown that the green space of MSC has stored more than 21,302 tons of carbon through sequestration in tree limbs, and to sequester this amount of carbon, 77,965 tons of carbon dioxide (CO2) have been absorbed from the earth's atmosphere. While absorbing this amount of CO2 in an industrial way requires a cost equal to 24 million euros. Also, more than 56,663 tons of oxygen have been released in the air due to the presence of these trees in the green space of the factory, which is equivalent to 1,321,7000 10-liter oxygen cylinders, and the cost of charging this number of cylinders is 4 million euros.

•IIn line with the optimal use of water resources, more than 99% of the green space of MSC is irrigated by drip irrigation method. This type of irrigation is achieved with an efficiency of 95% and a uniformity of distribution of 85%, and now its water consumption is 0.1 litre per hectare. Taking into account the period and time of irrigation throughout the year, the volume of water consumed by the green space is 3.5 million $m^3$ per year, if traditional irrigation methods, such as flood irrigation, were used, the maximum irrigation efficiency was 45% and was accompanied by a lack of uniformity in water distribution. In this method, the minimum water needed for irrigation of green space will be 7 million $m^3$. Therefore, this method of irrigation has saved about 3.5 million $m^3$ of water per year.

•Most of the water needed to irrigate the trees and green spaces of MSC is supplied from the treated wastewater of the factory and the surrounding cities.

### Promoting tree-planting culture

Considering the importance of trees in promoting environmental conditions, such as improving soil condition, water resources and welfare of other organisms, MSC has not only limited to maintaining and expanding green spaces within the factory and in line with its commitment to creating a better future using its capabilities and potential to realize the plan to plant a billion seedlings in the country, it has distributed 15,000 fruiting seedlings during the national week of natural resources and tree planting. For this purpose, in order to select the type of fruiting tree species, all employees and contractors were surveyed through SMS, during which 17,454 people, including 9,143 employees and 8,312 contractors, in this registration process, chose and received their desired seedling species.

**1500** hectares

There is green space and artificial forest in MSC factory

**%99**

The green space of MSC is irrigated by drip irrigation method

**%43**

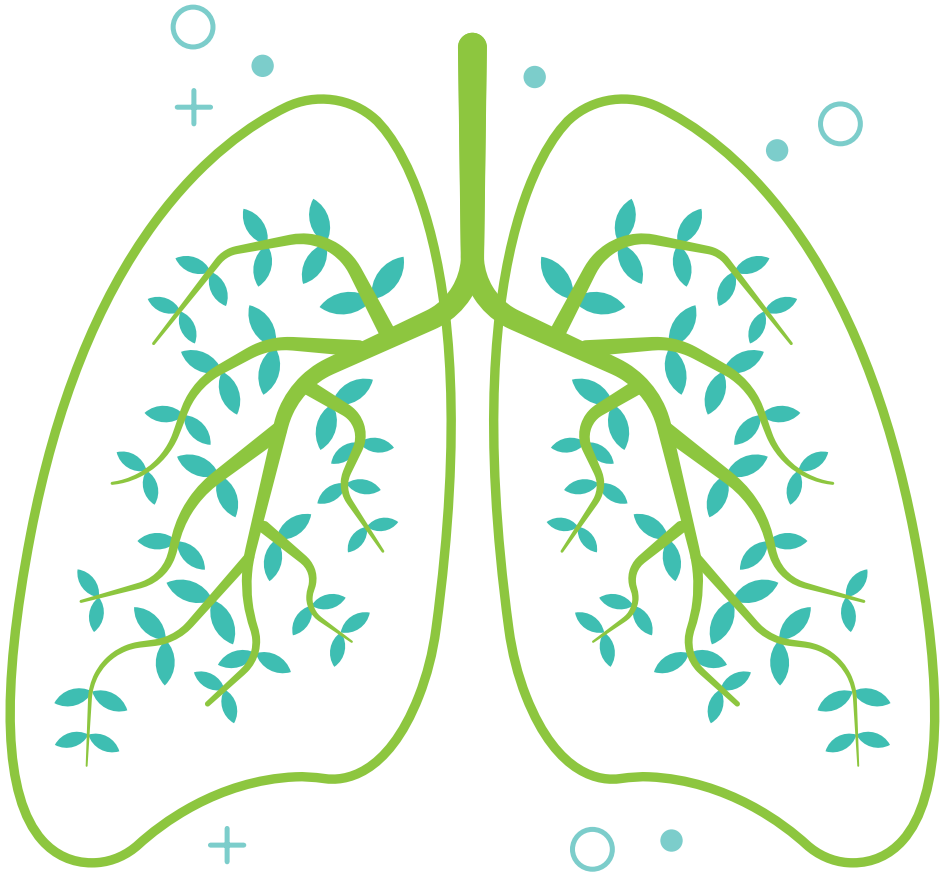
The area of the factory is dedicated to green space

**77965** tons

CO2 has so far been captured by the green space

**21302** tons

of carbon has been captured in steel trees through sequestration so far



**MSC's artificial forests, are the green lungs of the region**

**56663** tons

Oxygen has been released into the atmosphere by the green space of MSC

# Green investment

## Environmental investment

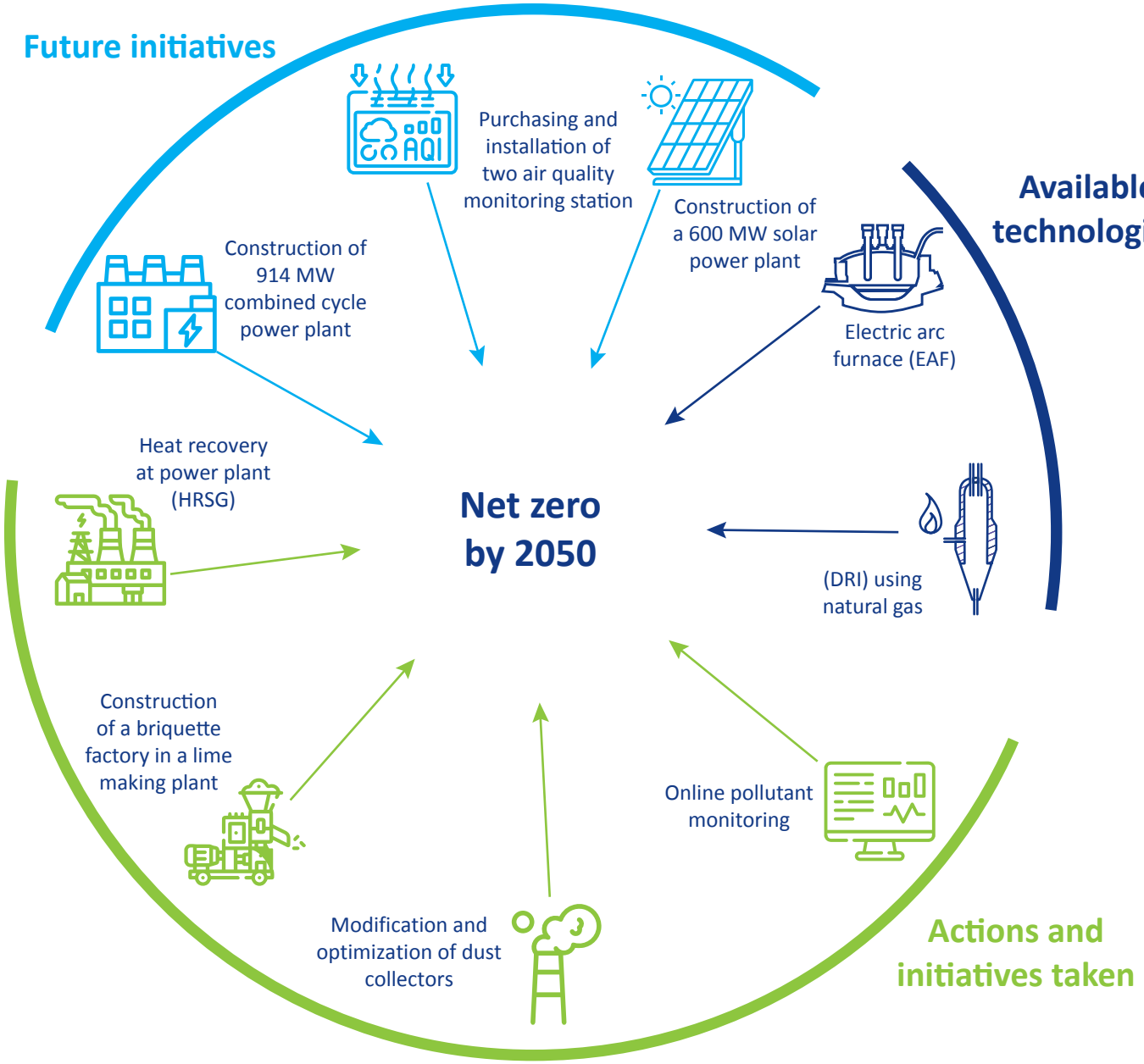
If we consider the mission of MSC as the industrial development of the country in line with the protection of the environment and natural resources, it will be clear that the costs spent on the purchase, installation, operation and improvement of the company's environmental performance are actualy the investments to move in the direction of sustainable development of the environment. MSC has planned to invest 2.3 billion US dollars in environmental protection over the past years, part of which is being carried out and another part will be completed in the coming years. In 2022, there was also a significant investment in the field of installation, commissioning and operation of dust control equipment, waste management, water, wastewater and energy have been carried out at the company level, which can be used to correct and optimize the equipment of the SABA steel dust collectors, Including hoods of dust collectors of electric arc furnace No.1, completing iron and steelmaking dust collectors, the control of the distribution of dust from direct reduction plant, completion of the project for the transfer and treatment of urban wastewater from nearby cities, the construction of a briquette factory in the lime making plant, the optimization of cooling towers across the factory with the aim of reducing water and energy consumption and reducing natural gas consumption in preheated hot rolling furnaces as an example.

# Management of pollutants

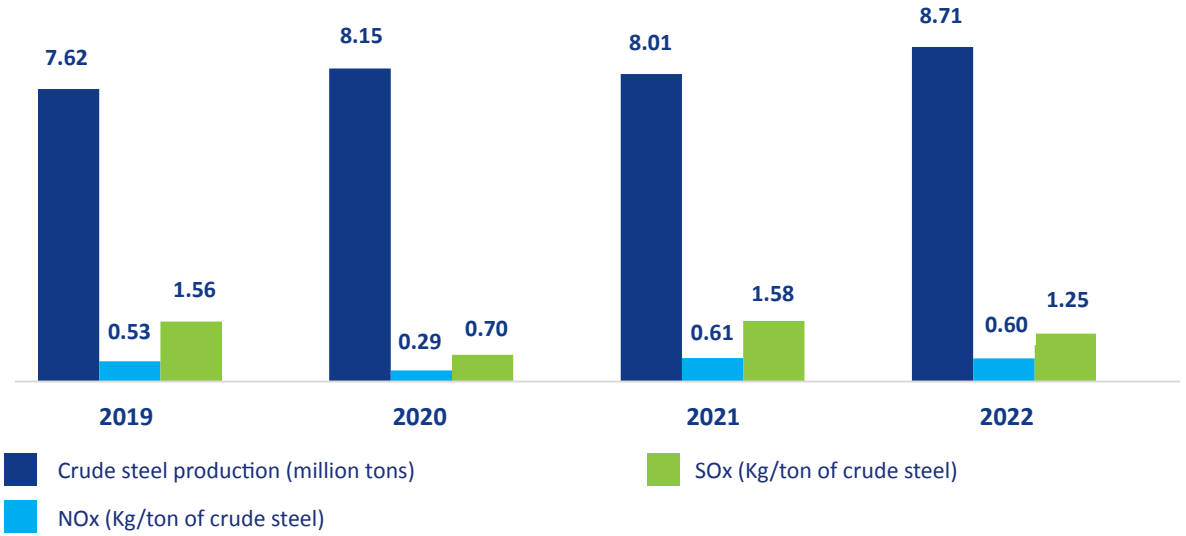
## A path to zero emissions

Considering the need to achieve zero emission in the world's industries by 2050, MSC has a special focus on reducing the carbon footprint and the amount of air pollutants. In this context, the most important step is to monitor the amount of pollutants released into the atmosphere, which are the result of production activities and processes. MSC monitors the quantity of carbon and pollutants by planning and implementing a variety of actions and approaches. Furthermore, the company has consistently implemented projects to enhance performance. Heat recovery from the output of the chimney of the gas power plant and heat recovery from the output of stacks of direct reduction plant, the construction of a solar power plant and a 914 megawatt combined cycle power plant (Class F) are among these projects. During the steel production process, sulfur, which is a impurity in raw materials such as iron ore, is combined with oxygen in the air and nitrogen (N2) and produces air pollutants such as sulfur oxides (SOx). MSC has taken several actions to decrease the emissions of these pollutants, one of which is by purchasing low sulfur raw materials.

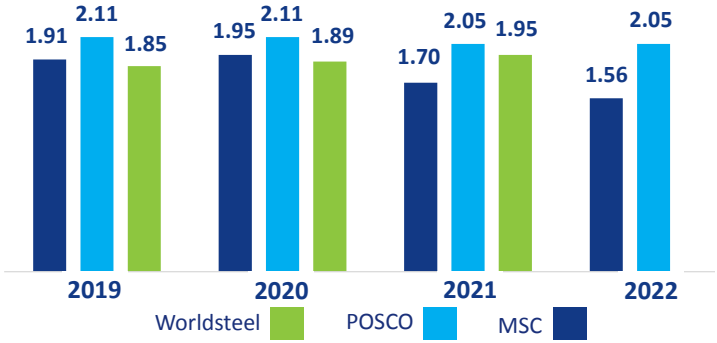
In MSC, the amount of environmental pollutants and dust in the air is measured at 45 and 25 points, which is monitored online at 12 points of pollutants and at five points of dust from chimneys. Besides CO, NOx, SO2 and dust, at least 52 other parameters are measured and monitored by the Iran's Department of Environment trusted laboratory. One of the important actions in the field of pollutant monitoring is the implementing of the environmental SCADA system and the aggregation of measurements information as one of the digital transformation projects. Also, MSC, in line with its commitment and responsibility, is looking to purchase and install two comprehensive air quality monitoring (AQI) stations at a cost of 250,000 euros in sensitive areas of Isfahan province.



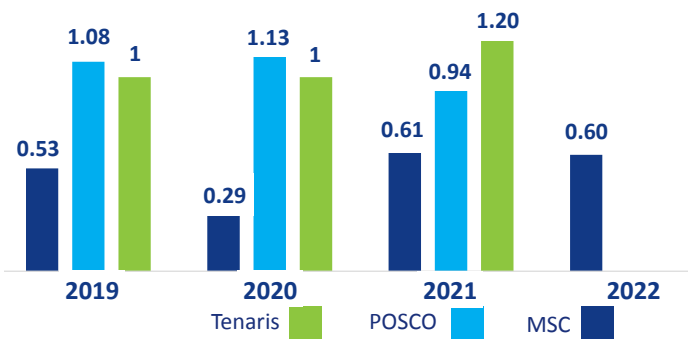

**Technologies, actions, and initiatives that drive us towards net zero by 2050**




The decrease in NOx emissions despite the increase in crude steel production in 2022 compared to the previous year is due to the improvement of torch equipment in furnaces. Also, the improvement of the amount of SOx in 2022 compared to the previous year is due to the improvement of the quality of raw materials.




Comparison of CO2 intensity (ton of CO2/ton of crude steel)




Comparison of NOx intensity (Kg of NOx/ton of crude steel)

Comparing the emissions of greenhouse gases (GHG) in MSC with world-class companies such as POSCO and Tenaris, as well as the statistics provided by the World Steel Association (WorldSteel), shows that the release of these pollutants is within the global range.

# Carbon footprint tracking

## Participation in monitoring and reporting of GHG emissions

One of the big challenges facing human societies in general and steel industries in particular is climate change. Steel industries need to reliably measure their carbon performance in order to track their potential contribution to Paris Agreement goals.
To this end, the first step to manage carbon emissions (CO2) is to collect data and then analyze them to track the level of industry performance. For this purpose, since 2007, MSC (together with Saba Steel Complex) has been providing its data in this field in the Data Collection System on the website of the World Steel Association (www.worldsteel.org) so that it can manage carbon in its various operating sites based on the analysis.
In the context of monitoring the reduction of carbon emission and other GHGs, the superheat steam production project was implemented by recovering energy from the gas power plant chimney for use in the steam power plant, which has the ability to reduce at least 120,000 tons of CO2 annually. Also, the construction of 914 MW (class F) combined cycle power plant and 600 MW solar power plant by MSC can have a significant impact on reducing greenhouse gas emissions directly and indirectly in the future.

## Summary of environmental plans and projects

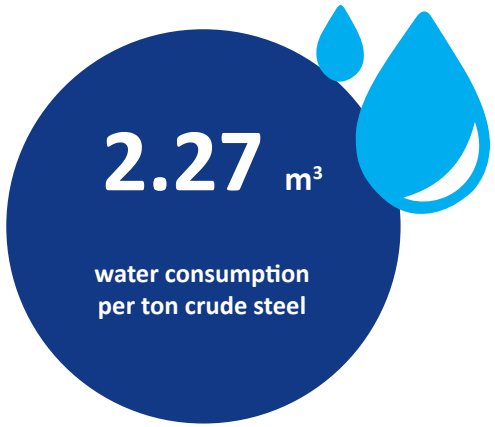
- In 2019, 10 different projects were implemented to control dust and reduce the emission of pollutants in iron and steel making areas.
- In 2020, 33 different environmental projects were defined to reduce pollutants at the factory.
- In order to reduce air pollutants, 12 environmental plans have been defined in the areas of iron making, steelmaking and continuous rolling of Saba complex, which have been put into operation by the end of 2020.
- 14 priority plans were defined and approved in 2021.
- The most important environmental project of the company in recent years is the plan to eliminate dust emissions from the roof of the steelmaking and continuous casting area, which was launched in 2022 with a budget of 750 billion tomans and will be put into operation by the end of 2024.
- In 2022, 14 projects on reducing air pollutants have been implemented in the company.


This certification has been awarded to MSC due to participate in the reporting and monitoring of greenhouse gases by the World Steel Association (WorldSteel).

# Water management

Reducing water resources due to climate change is the biggest challenge we face in the Middle East. Tension in water resources can endanger the quality of life in this region, especially in Iran. MSC is located in an area without access to the sea and has experienced a decline in existing water resources in recent years. Since the steel industry needs water, the local communities around us are keenly sensitive to our water consumption. Therefore, we have tried to take positive and effective steps toward becoming a responsible company and to create a better future for our stakeholders through our recent actions and achievements. In this regard, in MSC, we are pursuing three main approaches to maintaining stability in shared water resources between MSC and other stakeholders. In the first step, we have greatly reduced the amount of consumption at the same time, we have implemented the treatment and reuse of urban wastewater and we have finally invested in the water supply plan from Oman Sea.

A significant portion of MSC's water consumption is supplied through the treatment of the wastewater and its reuse to the production cycle, as well as the treatment of wastewater from neighboring cities and its use in the production process. The rest of the company's water consumption is provided from Zayandeh Roud River. The right to withdrawl water from the river in the company's initial design was about 40 million $m^3$, with the implementation of wastewater treatment and water recirculating projects, the amount of water withdrawal significantly decreased and the amount of fresh water intake in 2022 reached about 16.4 million $m^3$. Also, despite the increase in production at MSC the water consumed by the end of the process of producing crude steel per ton of production has dropped significantly from the initial design and from 16.6 $m^3$/ton of crude steel in 1992, which was considered in the initial design, It reached 2.27 $m^3$/ton of crude steel in 2022.




Comparison of water consumption in MSC with top companies in the world such as POSCO and JSW shows that the amount of water consumed in this company is within the global range.


Water intensity ($m^3$/ton of crude steel)

# MSC measures to optimize water consumption

### Use of non-treatable effluents (RO Reject) for slag cooling

In this method, non-treatable effluents of 90 $m^3$ per hour are used for slag cooling, and there is no need for industrial water to cool the slag.

### Wastewater and effluent treatment of nearby cities for using in the production process

Wastewater is considered a challenge in urban management, because not only the disposal or treatment of wastewater leads to direct costs such as financial costs, but also indirect costs such as lost opportunity costs to the management system, in addition to these wastewaters pollute the environment and are a threat to the health of citizens and endangering the health of citizens will have other social and economic consequences. With the aim of creating common value for itself and the local communities, that is, helping to develop social infrastructure and at the same time providing part of the water it needs, MSC has invested in creating a sewage network in the cities around the factory and after collecting and treating this wastewater It is reused in production processes.

With the financing required by MSC, the project of collecting and treating urban wastewater in Mobarakeh (Mobarakeh and Safaiyeh) and Lanjan (Zarrinshahr and Varnamkhast) cities has been implemented, and in cities of Majlesi, Talekhoncheh, Hassan Abad, Falavarjan, Soderjan, Kelishad, Shahr Abrisham, Baharan, Pirbakran, Bagh Bahadoran and Baghshad is being studied and implemented which, in addition to providing part of the water needed by the company and reducing the dependence on the water of the Zayandeh roud river, helps to improve the health status of the region. Accordingly, the transfer of urban wastewater to MSC started in May 2019 and the amount of wastewater transferred to MSC increased gradually and in 2022 reached about 7 Million $m^3$. It is expected that by the year 2031, with the increase in the flow rate of pre-purchased wastewater, %60 of the industrial water used in MSC will be supplied from urban wastewater.

### Quantitative and qualitative upgrade of industrial effluent treatment plant project

This project upgrades the industrial effluent treatment plant in such a way that it can absorb about %50 of the industrial water required by the company. Frequent recycling of water in MSC networks has played a key role in the significant reduction of water consumption across the company, which is due to the high investment in the quantitative and qualitative development of the company's treatment plants.

### The study of changing the cooling towers to hybrid type in direct reduction plant and related pumping stations project

This project tries to reduce water consumption by the direct reduction unit, which uses the highest amount of water. According to calculations, this project can reduce the water consumption of the existing cooling towers by %70.

# Water supply from the Oman Sea

Gavkhoni wetland is the last destination of Zayandeh Roud River. The wetland has progressed to the full drought boundary and is on the verge of exiting the Ramsar Convention List as a wetland. Currently, billions of cubic meters of water are leaving Isfahan province without considering the environmental crises that have arisen, and if this process is stopped, we can hope that part of the water problems in this province will be solved. Another part of the problems in the field of water resources and their optimal exploitation is due to the unupdated methods of agriculture and irrigation, according to this, MSC has focused on the investment in the project of transferring water from the Oman Sea to Isfahan province in order to meet the needs of the industry and also the residents of this province.

Although the amount of water consumption in MSC has greatly decreased and is lower than the global pattern of consumption, the industry's need for water is undeniable. Therefore, helping to solve the water problem on the central plateau of Iran is on the agenda of the company. To this end MSC has invested more than its share in this project, but it is hoped that with this project not only the problem of company but also the water crisis for all industries located in Isfahan province will be solved and there will be a good model for others to follow.

# Controling of water pollutants and wastewater management

In MSC's interpretation of the sustainability controling of water pollutant is very important because of the increasing importance of water resources and its impact on environmental, social and economic sustainability. To maintain the sustainability of water resources, it is necessary to control and minimize water pollutants. Because the reduction of pollutants can improve the quality of water consumed by the company and also improve the health of local communities. For this reason, all water pollutant parameters (52 parameters of drinking water) are sampled and measured according to environmental standards in MSC and of these, 20 main parameters of the wastewater of the industrial treatment plant are monitored online. In line with this approach, in 2017, the first phase of the supplementary wastewater treatment plant was launched in the company in order to recycle the treated wastewater better and more effective. Also, in 2018, the executive activities of the second phase of the additional industrial wastewater treatment plant and urban wastewater treatment from the urban wastewater collection system began. This project was put into operation in 2022 and resulted in a significant reduction in water consumption. In addition to reducing water consumption,MSC, in line with its commitment to its sustainability values, conducts continuous tests and analyzes online and weekly, and carefully monitors water pollutants.

**Measurement of pollutants of treated wastewater based on application in agriculture**

| Pollutants (mg/liter) | Performance | | | | Target (Allowed limit) |
|---|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2022 | |
| Grease and oil | 1.75 | 0.5 | 0.53 | 0.5 | 10 |
| Total Suspended Substances (TSS) | 32 | 13 | 5 | 6 | 100 |
| COD | 26 | 25 | 26.8 | 33 | 200 |
| BOD | 7 | 7.5 | 6.8 | 8 | 100 |

# Management of waste and by-products

At MSC, in addition to trying to produce with the least possible waste, we also follow different approaches to manage the generated waste. Examples of the company's recent actions include:

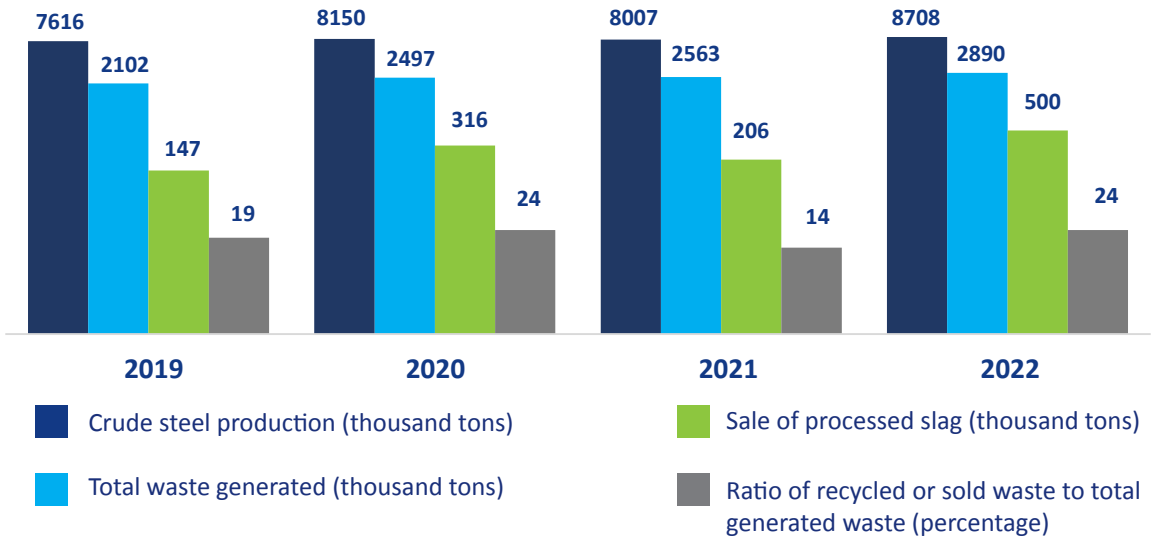
•Evaluation of the production areas based on the checklist for the implementation of the waste management system to promote the culture of waste management

•The use of processed slag and fine grains of limestone and dolomite in the internal projects of the company, as well as the processing and reuse of charge dust and oxide scales of steelmaking in the production process (which has increased the ratio of recycled or sold waste to the total waste produced)

•Management of industrial waste through the comprehensive human environmental system with the aim of reducing waste and precise control of waste at the destination.

•Separation and segregation of all waste generated in the company and keeping it in appropriate places, based on documented approaches

•Weekly and monthly monitoring of the state of waste management at the company level and waste depots reflecting the results of this monitoring in monthly reports or environmental non-conformity notification forms and reviewing the measures taken at the district level through a comprehensive system of corrective actions




As it shows, the amount of crude steel production and as a result the amount of waste production has increased. However, effective measures in the management of waste and by-products have increased the ratio of recycled/ sold waste to total waste generated and processed slag sold over four years.

**The average score of the MSC plants in the waste management system (%)**

| Plants or Units | 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|---|
| Iron making | 97.08 | 93.41 | 85 | 89.3 |
| Steel making | 95.25 | 87.83 | 93.17 | 95.3 |
| Hot rolling | 99.5 | 100 | 100 | 100 |
| Cold rolling | 96.91 | 91.66 | 97.07 | 95.8 |
| Central workshopp | 98.25 | 95.83 | 98.06 | 98.5 |
| Energy and fluids | 98.75 | 100 | 95 | 97.2 |
| Material control | 99.83 | 100 | 99.41 | 100 |
| Transportation | 99.16 | 99.66 | 92.25 | 95.45 |

# Slag processing

In order to preserve the environment, MSC has created and implemented various measures in the field of waste management and recycling. One of these measures is the implementation of a research project by benchmarking the world's steel companies (Diproinduca, Canada and Multiserve, USA) for the processing and sale of steelmaking slag.
MSC produces 14 practical products from the processing of steelmaking slag in road construction, buildings, urban planning, etc. The company has sold more than 300,000 tons of these products so far, and new requests have been submitted in this regard. Refractory waste is another part of waste from steel production processes which is also sold as by-products.

### Applications of the processed hot slag

- Raw material in the production of special cements
- Replacing part of the cement in concrete preparation
- Abrasive material in sandblasting operation (amount of free silica < %1)
- Raw material in the production of cement suitable for oil wells
- Raw material in the production of floor tiles and firebricks

### Applications of the processed cold slag

- Replacement of petroleum products in dealing with desertification to prevent the movement of blowing sand, control dust and particles, and prevent the environmental pollution with petroleum products.
- Annual conversion of 500 thousand tons of slag to usable products in the production of blockage, base and subbase, rail ballast, and slag asphalt.
- Reducing the rate of waste generation by potential use in other industries and protection of the environment with the approach of protection of materials and resources.

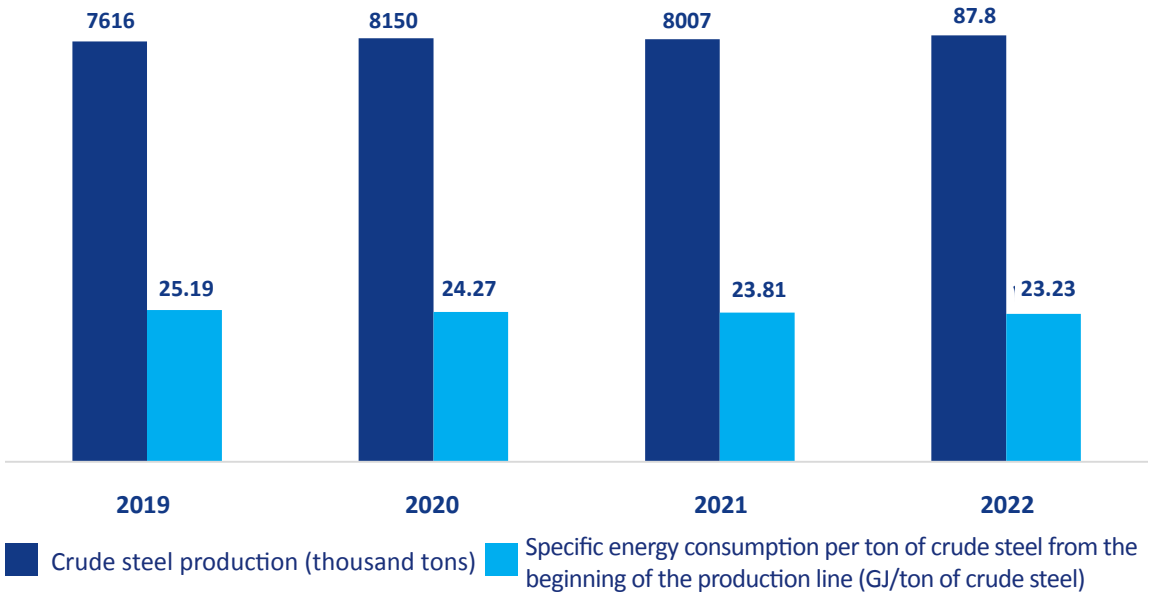
## Control of spills resulting from waste storage

All lagoons and landfills built for the purpose of landfill or storage of industrial waste and sludge are completely isolated by standard covers and liners. In addition to the evaporation lagoons of the company's wastewater treatment plant, as well as the sludge and dust storage lagoons of Saba complex, this feature has been observed in all the lagoons of the new waste site, which is considered one of the most main waste sites in the country. Also, Half of the implementation costs of the site is allocated to the lining of the lagoons. The complete lining of the floor and walls of the waste storage with special epoxy resin is another measure for the control of Askarel oil spill into the soil.

# Energy management

The concept of sustainable development is tied to production and production requires energy consumption. In recent years, with the effects of climate change becoming tangible, countries are moving towards a low-carbon economy and reducing their carbon footprint. According to what the World Economic Forum (WEF) has mentioned in its goals, measures taken by industrial sectors to achieve net zero by 2050 must have reached a conclusion. Because reaching a carbon footprint close to zero does not happen all at once. MSC has continuously taken steps in the direction of optimal management of energy consumption and reducing the use of energy from fossil fuels. The first step is to reduce the use of non-renewable resources. MSC is trying to reduce its loading capacity on the national power grid by building a new 914 MW combined cycle power plant and, on the other hand, launching a 600 MW solar power plant in the Koohpayeh region near Isfahan to sustainably exploit renewable resources.

MSC energy consumption has been declining over the past four years despite the rising of crude steel production. Improving the production process and energy management related projects has led to this improvement.



# Supreme committee of energy

In line with the main policies of optimizing energy consumption and sustainable development at the country level, the Supreme Energy Committee of MSC was formed in 1999 with the chairmanship of deputy of operation and the membership of managers of related departments. The goals and duties of this committee are to make policies to provide reliable energy for the present and future of the company, to bring energy consumption indicators to global standards compared to competitors, to optimize energy consumption to reduce the total price of the product, to maintain environmental indicators and to establish an energy management system. In order to achieve these goals, an energy audit has been conducted in all production and support units with the aim of finding energy waste points and improving them, and the results are used in different units to define projects for improving and reducing energy waste. Also, energy consumption management trainings are given to employees at all organizational levels in order to create the necessary views, so that the maximum capacity of human resources is used in achieving this goal. One of the most important improvements made in the field of energy management is the improvement of processes based on the ISO 50001: 2018 standard.

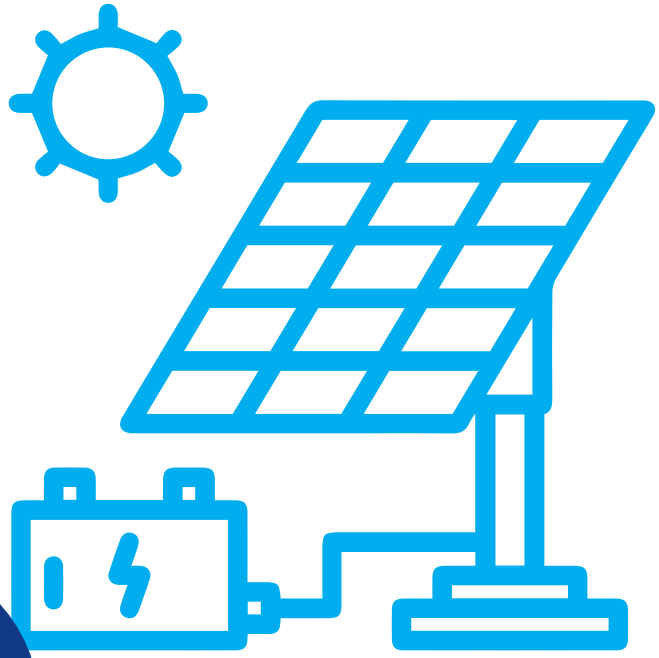
## Combined cycle power plant

In order to provide the energy needed by company and reduce the peak load of the power grid network in the country, especially in the hot seasons of the year, the project for the construction of a 914 MW combined cycle power plant has begun. At present, the construction of this power plant has progressed more than %70 and hopes that in 2023 two gas units with a capacity of 614 MW will be operational and up to %15 of the energy needed in the summer will be provided. It is also planned that by 2025, all three units of this power plant will be operational and 750 MW of energy needed by the company will be provided in this way

# Solar power plant

The purpose of MSC is to use clean and renewable energy and production with the lowest carbon footprint, so the construction and commissioning of power plants with the least damage to the environment and the highest efficiency are on the agenda of the company. The construction of such power plants will help the company, while ensuring the interests of its stakeholders, have less loading on the country's energy networks. In addition, it is planned to create 10,000MW of renewable power plant capacity in the country, and industries have committed to provide 2,300 MW of this amount. MSC has pioneered in this field to supply 600 MW through solar power plant and 200 MW through wind power plant.

- The construction of this power plant began with an initial investment of 16,450 billion Tomans.
- With the implementation of the solar power plant project, more than 600 people will be directly employed during construction and 70 people during operation.
- Most of the equipment of this power plant is supplied from domestic manufacturers, which causes indirect employment and the prosperity of the country's electricity industry in the field of renewable energy.
- Now the capacity of the entire country's solar power plants is about 450 MW, while the MSC solar power plant project alone adds 600 MW of renewable energy to the country's solar power capacity.
- According to studies and plans, there is also the possibility of developing the capacity of this power plant up to 1000 MW.
- Considering the capacity of this solar power plant, 350 million $m^3$ of natural gas are also saved per year.
- The power plant can prevent the release of 810,000 tons of CO2 per year.



**600**
**MW**
**Capacity of MSC solar power plant**

# Market, customers and eco-friendly products

We believe in MSC, moving in the direction of responsible business requires paying attention to the market and the needs and demands of customers and creating value through the production of innovative and eco-friendly products. We believe that our survival depends on the existence of satisfied and loyal customers and the continuation of the movement on the path of sustainability is conditional on their willingness to accompany us. MSC, as one of the pioneering and key industries of the country, has a significant part of the market demand for steel products in Iran. This company has many customers in different industries in the country. About 1,500 direct customers and more than 5,000 indirect customers, which are made up of factories all over the country and are known as active customers of MSC. These major customers include various industries and fields of activity.

**6500**

**Direct and indirect customers**

**MSC customer groups in different industries**

| Customer group | Customer group |
|---|---|
| 1. Steel finishing industries | 7. Metal structures |
| 2. Service centers | 8. Transportation (Automotive and related parts) |
| 3. Fluid pipelines (oil, gas, petrochemical and water) | 9. Home appliances |
| 4. Pipes and Profiles | 10. Packaging industries |
| 5. Vessels and storage tanks | 11. Metal industries |
| 6. Machineries | 12. Commercial companies |

# Designing of new eco-friendly products

The product portfolio in MSC is determined with a forward-looking approach (macro trends) to changes in the needs and expectations of customers in domestic and foreign target markets and in the direction of the company's path toward sustainable business, developed and new and expected products.

MSC is designing new products on its way to creating a sustainable business with the approaches of producing eco-friendly products and reducing the country's dependence on foreign products. In this regard, the design of new products is done in two ways: designing new products and changing the characteristics of current products. To achieve this goal, the products identified using the GE matrix are evaluated and prioritized in the two dimensions of market attractiveness and company capability, and new product production processes are designed in alignment with the technology roadmap. Then the produced sample is presented to the customers and after approval, corrections and standardization of products are done. Finally, new products are registered in the order registration system. Stainless steel, SPFC440, S550MC grades of dual-phase (DP) steel, all kinds of steel belts and sour gas plates are among the latest products of the company, especially in the field of eco-friendly products. Also, with the aim of attracting the participation of stakeholders in the design and production of new products, various approaches such as defining joint projects and holding specialized meetings with customers, obtaining technical opinions about new products from customers, research projects with academic centers, and suggestion system are planned and implemented. MSC tries to increase customers' satisfaction with flexibility in product development by developing a portfolio of products in line with customers' expectations. Steel products and grades produced with the mentioned approaches in 2021 and 2022 are:

## Steel grade: ST-52 (FAT)

Previously, this grade was supplied from abroad, and in some situations due to the impossibility of supply, the normal ST52 grade was used instead, which did not perform well; In this regard, this grade was designed and produced to be used in parts that are under intermittent stress and must be resistant to fatigue. This grade is used in the construction of bridges, car suspension parts, metal forming molds, rails and parts with high vibration subject to fatigue.

## Steel grade: HX220Y

Following the request of Iran Khodro automaker company and in order to be used in the production of Tara car gas tanks, the relevant standard for the production of this grade was checked at MSC, and this grade should have high ductility and good mechanical properties, and at the same time, it should be resistant to corrosion, it was designed and produced in cooperation with Chahar Mahal and Bakhtiari Sheet Metal Company (CBSCO). This grade is designed based on the EN10346 standard and is one of the ductile steel grades with high strength and low carbon content. With the production of this special grade for Iran Khodro company, the possibility of attracting orders from other customers was also provided.

## Steel grade: HE445D

This grade is produced in the form of pickled steel coils and based on the request of automobile manufacturers. This grade is considered to be a high strength micro alloy steel and is widely used for automakers and component manufacturers.

## Steel grade: 550YC

This product is included in HSLA grades and elements such as Nb and Ti have been added to this steel. Due to the presence of these elements, carbonitride particles are distributed in the microstructure. Due to the fact that these particles face misplaced movements with limitations, their strength and impact resistance increases. This steel grade is usually used in the suspension system of Saipa Co. new automobiles.

## Steel slab: API X80

According to the request of Oxin Steel company, regarding the production of steel plates required for the production of 5L-APIX80 commercial quality plate for the production of pipes required for oil and sweet gas transmission industries, this product was designed at MSC and produced after obtaining the necessary approvals. This product contains molybdenum, titanium, niobium and vanadium alloy elements. Also, the maximum amount of sulphur, hydrogen and oxygen of the mentioned tanks has been controlled; This product was sent to Oxin Steel Company after conducting chemical analysis and microwave tests and checking surface defects, and it has been successfully converted into APIX80 commercial quality plate.

## Steel grade: DX56

This grade is the most ductile grade requested by automotive manufacturers in galvanized form. The crude plate produced of this grade in MSC is delivered to Chahar Mahal and Bakhtiari Sheet Metal Company (CBSCO) and this company obtains the necessary properties by performing proper annealing. This grade is one of the IF steels with a very low carbon percentage and has super-tensile properties, and its production standard is EN10346.

## Steel grade: HCT600X

Low thickness and high strength cold-rolled plates have recently attracted the attention of many automobile manufacturers; The most important reason for demanding this steel is the need to reduce the car's weight and increase the safety of people; In this regard, ultra-low carbon grades with high strength and hardenability were developed, but the ductility of these steel grades decreases greatly with increasing strength. Therefore, the need to produce steel that has good ductility while increasing strength was felt in the automotive industry. Dual-phase steel was the first type of steel that meet this need, and this product has been produced in MSC in cooperation with Chahar Mahal and Bakhtiari Sheet Metal Company (CBSCO) .

## Packing belts

One of the materials in the hot rolling and cold rolling plants are packaging belts, which became impossible to enter the country after the imposition of sanctions. Therefore, MSC started to produce these belts. In the first stage, the company produced the full hard belt plate and after delivering it to another company and applying the coating and baking operations, it imports the product in the form of belts and uses them in the packaging lines.

# Dual-phase (DB) steel

Iran is a vast land and using the automobile through roads is one of the most important methods of transportation in it. Therefore, it is very important to use high-quality, safe and eco-friendly cars. Obviously, improving the quality of domestic products and approaching global standards will increase the safety of cars, reduce fuel consumption, and increase the satisfaction and well-being of the consumer community. In this regard, one of the important needs of the domestic car manufacturers was the production of dual-phase (DB) steel, which, despite the decision of most of the domestic steel manufacturers to produce this grade from the past years until today, due to knowledge and equipment problems, it was not possible to produce this grade in the country. With the efforts of MSC employees and their mastery of CSP line technology, as well as research conducted in cooperation with prominent domestic universities, this company for the first time in the country succeeded in producing this valuable and strategic grade in accordance with ASTM A1088 and EN 10388 standards. Dual-phase steel also is used in the production of parts of car chassis which are exposed to impacts.

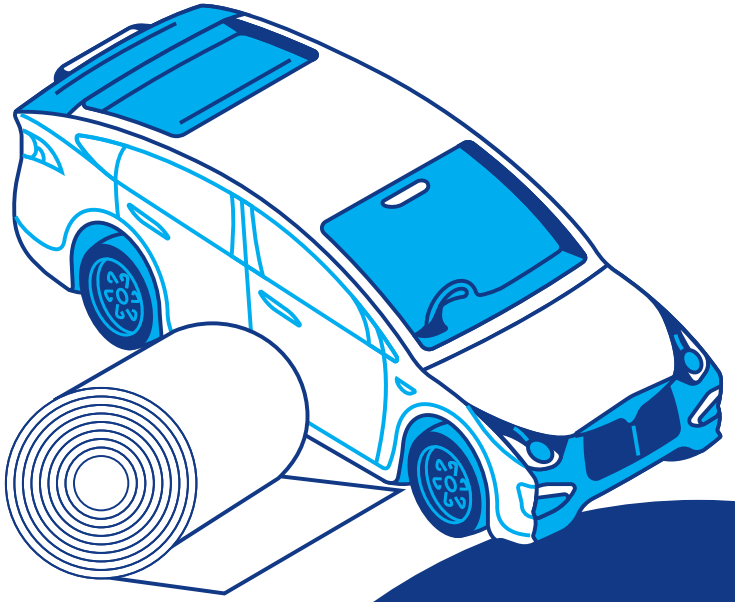
## Dual-phase steel has a lower environmental footprint because:

**Increased content of recycable materials:** Dual-phase steel contains a higher percentage of recycable materials than conventional steels. This feature reduces the need for new raw materials and leads to a reduction in the environmental footprint.

**Improved performance:** Dual-phase steel has more strength and ductility than conventional steels, which allows the production of thinner and lighter parts to reduce energy and consumables and reduce environmental impacts.

**Less energy consumption:** The production process of Dual-phase steel consumes less energy than other steels (due to the lower melting point and faster solidification time helps to reduce energy consumption). This feature reduces the amount of greenhouse gas emissions during production.

**Longer life cycle:** Dual-phase steel is more resistant to corrosion than traditional steel, more durable and requires less maintenance. It reduces frequent replacing and the amount of results sent is reduced.



**Dual-phase steel is an eco-friendly economic product**

In addition to being a widely used product in the automotive industry, dual-phase steel is also considered an eco-friendly product due to the reduction of environmental impacts during production and use.

# Other new products

## Stainless steel

After the production of special steels with high added value was put on the agenda, MSC was able to produce and supply this valuable product for the first time in Southwest Asia and North Africa by acquiring the technology of stainless steel production.

## Corten steel grade

Among the steel grades required for thermal power plants is the Corten steel grade, which is aimed at meeting the needs of the country's electricity industry, reducing dependence on foreign products, preventing foreign currency from leaving the country, developing and diversifying the portfolio ofcompany products and producing special steels. With high added value, the production of this product was localized in the company

## Tread plate

After the production of type (T) almond-shaped tread plate, in 2015, S235JR grade tread plate with a width of 1250 mm, thicknesses of 3 ,2 and 6 mm and according to customer order and global DIN59220 standards are produced at MSC. This plate is used in the production of industrial platforms, staircases, bridges, automotive industries, making decks and trucks and vans.

## Electric steel Slab with %1.8 silicon

Considering the high content of silicon and the low level of carbon and sulfur in silicon steels, the production of molten steel with proper chemical analysis and flawless steel requires technical knowledge and accurate calculations and special controls, which with the efforts of MSC experts it was produced for the first time in Iran.

## Anti atmospheric corrosion steel grade with a thickness of 2 mm

Considering that the main need of the country in the construction of containers and wagons is low thickness steel, the import of this steel grade from abroad was done in these industries, and this product was also produced in MSC. This grade is used in the construction of sea transport containers, railway wagons and bridges.

# Customer value proposition

In MSC, according to the key needs and expectations of customers and according to the company's strategic management process when designing the business level strategy map, the proposed value for different groups of target customers is defined and revised or validated every year. At the same time, in order to effectively implement the "value proposition", key indicators and related strategic measures are defined, implemented and monitored.

| Objectives in order to provide value proposition to customers | Related strategic actions |
|---|---|
| Increasing customer satisfaction and loyalty and improving customer experience | Design and establishment of satisfaction measurement system for indirect customer (service centers) |
| | Providing analytical reports of survey results to related units |
| | Customer experience project |
| | Conduct survey through unique SMS link for customer convenience and accessibility |
| Development of a centralized internal sales system for group companies' products | Establishing a centralized sales system for galvanized products using the potential of the group's covering companies |
| Effective management of customer data | Customer data mining project |
| Promotion of MSC brand | Assessing the position and strength of MSC brand from the customers' point of view<br>Experience design based on brand strategy in the customer domain |
| Development of information systems | Improving the call center mechanized system |
| Customer Relationship Management (CRM) | Improving and upgrading the customer relationship management system |

## Customer Relationship Management (CRM)

MSC's customer relationship management system is one of the important tools for communicating with customers and informing them. In addition to managing customer information, this system documents the technical and commercial claims raised by them and provides various reports to customers, including product shipment status, orders and invoices and financial information. Our CRM system is also a powerful tool in obtaining feedback from customers through surveys.

## Informing customers

MSC provides the following services in order to respond and provide information and commercial and technical guidance for customers:
1.Technical advice on how to use the products
2. Publication of product technical manual
3. Holding technical and business meetings and specialized seminars (for some customer groups)

These measures are evaluated through surveys and indicators of satisfaction with technical advice, satisfaction with business advice, the number of training courses held for customers and the number of technical recommendations to customers. In addition, an expert is assigned for the products and the product brochure is updated according to the feedback received from the customers (including mechanical properties of different grades, packaging and defects).

## Product life cycle management

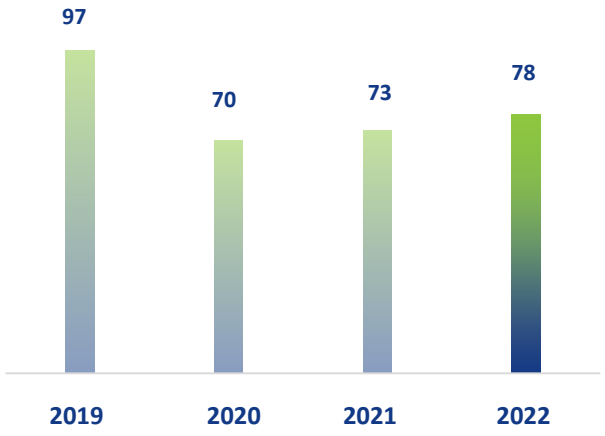
MSC considers the environmental, safety, social and legal consequences during the product design and optimization process and through related risk management. Steel products have a long life cycle and therefore, MSC intends to support circular economy principles to reduce environmental impacts by recycling and reusing used products and even by producing new products by them. Aspects of the product life cycle from the supply chain to delivery and return are monitored and controlled in the company in compliance with ISO 14001 standard. In addition, product life cycle assessment is carried out with the help of recognized domestic universities for some products.

**Effective health, safety and environmental management approaches in the product life cycle from delivery to the customer to recycling**

| Life cycle stage | Environmental approaches | Public health and safety approaches |
|---|---|---|
| Delivery to the customer | Increasing the organization's focus on rail transportation | Preparing instructions and monitoring how to transport products<br>Preparation of a brochure on how to comply with product safety instructions<br>Safe control and containment of finished and coated products on trucks and wagons<br>Providing storage instructions to customers to reduce risk |
| Product use by customers and consumers | Production of products with anti-corrosion coatings that increase the useful life of products<br>Collection and recycling of steel waste in customers' production lines | Preparation and distribution of safety and health brochures for the use of coated products<br>Teaching customers how to store products<br>Ensuring non-conforming tin plated products for food use are not shipped |
| End of product life | Steel scrap recycling<br>Obligation of scrap supplier companies to separate scrap<br>Controlling the non-entry of contaminated scraps (containing oil and grease, explosives, asbestos, silica, etc.) | Establishment of 5S at the material handling and scrap preparation site<br>Monitoring harmful factors in the work environment |

## Active communication with customers

MSC has taken various approaches in order to improve communication with customers. These approaches include technical recommendations, periodic and regular visits (with a maximum interval of three years for each active client), face-to-face interviews, etc.



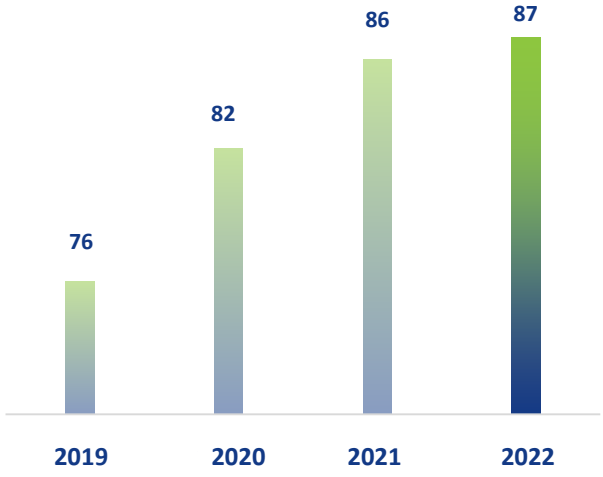

Number of technical advices provided to customers

## Accountability and providing commercial and technical information and advice

In MSC, customer satisfaction with accountability is evaluated based on three criteria:

### Customer satisfaction with accountability

Our company focuses on managing relationships with customers, creating better communication channels and implementing improvement programs such as increasing the stability of the system and creating a complaints section in it, improving the electronic addmission system for customers, holding regular meetings of the admissions committee and reducing the waiting time of applicants for review in the admissions committee has succeeded in increasing the satisfaction of this group of stakeholders




Satisfaction with accountability (%)

### Customer satisfaction from providing commercial and technical advice

Other measures taken by MSC to obtain customer satisfaction include assigning a technical expert to each field of activity, providing technical and commercial advice needed by customers, attending the factories of some customers, and holding training courses with the aim of familiarizing customers with products and improving technical information.

### Customer satisfaction with handling claims

In 2016, in order to improve the process of registering and handling customer claims, it was possible to register claims through the CRM system. Due to the ease of registering claims, a large number of false claims were registered by customers, and for this reason, it takes more time to process these claims. To solve this problem, experts were given the responsibility of dealing with each field of activity, and handling of some claims was done in absentia. The result of these actions was to reduce the duration of processing claims and increase customer satisfaction in recent years.

# Customer survey

We continuously and annually measure the opinions of our customers according to the ISO 10004 standard using a survey (questionnaire) and through the CRM system. In this system, after collecting, processing and analyzing the data, the relevant report is sent to the relevant departments (such as the production, quality control, marketing and sales etc.) And according to that, the programs needed to improve customer satisfaction are defined and implemented. Also face-to-face meetings are held to find out the root causes of low satisfaction of customers who have the lowest level of satisfaction. Face-to-face interviews are conducted to ensure a thorough understanding of the opinions of key customers. In this context, a comprehensive analysis of the survey results has been done and guidelines have been designed for interviewing customers.

In addition to conducting surveys through the CRM system and in order to facilitate the process and better access of customers to survey questions, as well as to reduce the risk of instability of information systems and internet networks, for the first time unique links via SMS were sent to the mobile phones of customers who in 2022 had made a purchase to complete the survey form. As a result of these measures, the response rate of customers to the survey has been increasing in the last few years and has reached 71% in 2022 from 41% in 2019.

## Customer satisfaction and loyalty

MSC's solutions to maintain overall customer satisfaction in a stable state and increase their willingness to buy again and recommend to others include managing production operations, improving product quality, planning and controlling product transportation, customer relationship management (CRM) and diversity in conditions and terms. These solutions have increased the NPS (Net Promoter Score) index from 49% in 2021 to 65% in 2022.

## Satisfaction with payment terms

In order to improve payment terms and increase customer satisfaction, MSC has developed credit sales methods and facilitated the terms of their use for customers. These efforts were realized in 2017 by offering the possibility of using long-term LCs to all customers. In 2021, the combined payment conditions were also provided to make it easier for customers to buy in the Iran Mercantile Exchange (IME).

## Providing high quality and stable products

In order to increase customer satisfaction with product quality, MSC has implemented measures such as the establishment of a quality control system and numerous quality improvement projects in production processes based on the results of customer surveys. Examples of quality improvement projects include "finding and removing defects related to the improper structure of the surface roughness of automobile manufacturers products" in the cold rolling plant, as well as "starting automatic grinding on pinch roll coilers", "improving the performance of loopers" in the hot rolling plant and "decreasing dimensional tolerances in tin plated products".

# Handling of customer claims and complaints

In the CRM system of MSC, customers' claims and complaints are registered first, after expert review and decision making, appropriate action is taken to deal with it and respond to the customer. In order to prevent the recurrence of the problem and eliminate the root causes, the necessary preventive and corrective measures have been taken and the final result will be communicated to the customer.

In MSC, Customer Technical Assisstant (CTA) is responsible for investigating and analyzing customer complaints and claims. This unit examines the report of trends and defects created in the products and provides the necessary feedback to the production areas in order to prevent the recurrence of defects by taking corrective measures.

## The process of technical handling of customer claims and complaints

1. Receiving a complaint/claim (in the CRM system)
2. Preliminary review and evaluation of the complaint/ claim and collection of preliminary information
3. Quick contact with the customer to receive additional information and determine the time to visit in person
4. Technical examination of the product at the customer's place
5. Determining the possible fault and providing different solutions to the customer
6. Making an agreement and preparing the minutes of the meeting with the authorized representative of the client
7. Referring the defect to the relevant units in order to take corrective and preventive measures and prevent recurrence
8. Pursuing corrective measures (through joint meetings, expert meetings, etc.)
9. Notifying customers and receiving feedback from the results of actions and transferring the received feedback to related areas

## Approaches to managing customer claims and complaints

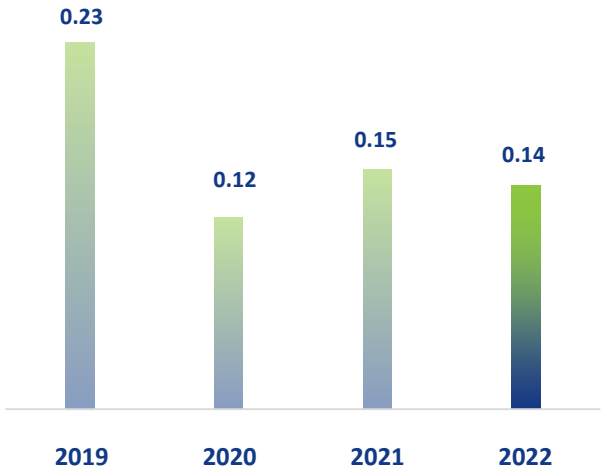
1. Management of customer claims and complaints based on ISO 10002 standard
2. 24x7 (seven days a week and 24 hours) customer access to the online system for registering and tracking the claim status with a dedicated account
3. Prioritizing customer claims and complaints in line with customer satisfaction and social responsibilities
4. Systematic management of customer claims and complaints
5. Answering and providing information and commercial and technical guidance to customers
6. Definition and prioritization of corrective measures based on the reasons for customer claims and complaints

**24x7 (seven days a week and 24 hours) customer access to the online system for registering and tracking the claim status with a dedicated account**

## Method of prioritization of claims

Customer complaints and claims that have been registered in the customer relationship management system (CRM) and have gone through the stage of entering the customer technical assisstant unit are prioritized in three levels H, M and L based on the criteria of complexity, severity and impact.

| Criterion | The relevant parameter | | H | M | L |
|---|---|---|---|---|---|
| Complexity | Customer sensitivity | | Follow-ups and expressions of sensitivity by the customer (causing the customer's production line to stop) | Follow-up by the customer (causing a slight effect on the customer's process) | No follow-up by the customer (negligible effect) |
| | Management opinion (and sales and marketing department) | | High emphasis of management | Management emphasis | No order |
| Severity | Tonnage effect | Slab, hot-rolled | More than 500 tons | Between 100-500 tons | Less than 100 tons |
| | | cold-rolled | More than 100 tons | Between 50-100 tons | Less than 50 tons |
| | | Coated | More than 80 tons | Between 20-80 tons | Less than 20 tons |
| Impact | Impact on the safety and health of society and the effect on the brand (MSC and Customer) | | Packaging, automotive | Fluid transfer pipes | Other field of activities |




The percentage of accepted product claims to the total delivered tonnage (%)

### Claims prioritization statistics

| Claims priority | Mean time of handling (days) | | | Number of claims | | |
|---|---|---|---|---|---|---|
| | 2020 | 2021 | 2022 | 2020 | 2021 | 2022 |
| H | 122 | 48 | 73 | 378 | 601 | 481 |
| M | 127 | 133 | 98 | 305 | 121 | 33 |
| L | 59.1 | 79 | 78 | 652 | 378 | 332 |

The main reason for the high claim handling time in 2022 was the outage of the CRM system due to cyber attacks and customer orientation (changing the customer's decision to use the product instead of returning it).

# Customer training

In order to increase the awareness of customers and improve their satisfaction with commercial and technical guidance, MSC organizes numerous training courses and specialized seminars for customers and has designated an experienced expert for each field of activity.

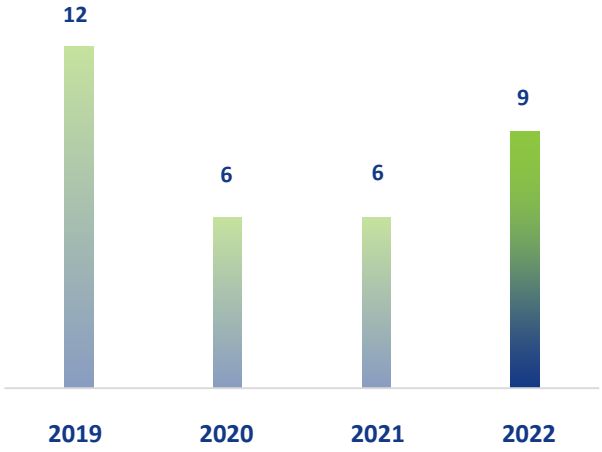
## Handling and response time to the claims

Since 2016, the ISO 10002 standard has been used to improve the process of handling claims and complaints. In this regard, measures such as the implementation of the CRM system to handle complaints, the employment of a resident technical expert in some customer companies such as automobile manufacturers, and the assignment of experts to each field of activity have been carried out. The aim of these approaches is to increase the speed of processing claims and provide the best technical advices.

## Training areas for customers

- Introducing the production plants of MSC
- Introducing the production process, grades and technical applications of the products used by the customer
- Introduction of technical standards of products used by customers
- Getting to know the defects of the products used by the customer
- Familiarity with the specialized safety of the products used by the customer
- Related topics asked by the customer

* All discussions in training courses for customers are conducted based on technical information booklets and product consumption guide of MSC.




The number of training courses held for customers

**Training courses held for the customers**

| Title | Year | Customer |
|---|---|---|
| Familiarity with the standards of steel plates used in the automotive industry | 2021 | HOSCO |
| Reduction of oxide scale defect of mill | 2021 | Isfahan steel Co. |
| Technical information of the tin-plated product | 2021 | Fajr Golestan Co. |
| Technical information of the tin-plated product | 2021 | Omidan Tous Co. |
| Technical information of hot-rolled products and welding topics | 2021 | Akam Folad Co. |
| Technical information on colored products | 2021 | Nobough Sarmayesh Co. |
| Technical information of hot-rolled products and welding topics | 2022 | Sepahan steelmaker parts Co. |
| Technical information of the tin-plated product | 2022 | Asia Power Steel Co. |
| Getting to know the quality defects of cold-rolled and galvanized products | 2022 | Fuladiyar Korosh Co. |
| Technical information of hot-rolled product and acceptance limit standards | 2022 | Mashhad Wheel Manufacturer Co. |
| Getting to know the hot-rolled product production process and its limitations | 2022 | Calup Saveh Co. |
| Technical information and mechanical properties of tin coated plates | 2022 | Fajr Golestan Co. |
| Technical information and production process of coated tin-plated product | 2022 | Azaran Ghooti Esfahan Co. |
| Technical information and production process of coated tin-plated product | 2022 | Golestan Pak Zarf Co. |
| Technical information, standards and tolerances of cold-rolled products | 2022 | Saipa Co. |

# Engaging with customers as business partners

In order to increase engagement with its stakeholders, MSC organizes conferences and think-tank meetings with its customers. The sales and marketing department organizes these conferences with customers as one of the key stakeholder groups of the company with the aim of establishing effective communication with business partners. In these conferences, which are held with the presence of customers from various fields of activity, their needs and expectations as the main customers of MSC are expressed, and their questions and concerns are answered. At the end of each conference, all participating customers are honored with a plaque to celebrate their cooperation. In 2022, four conferences were held with different companies, including pipe and metal structures, automobile manufacturer, storage builders, and oil and gas. The plan of these conferences is of particular importance in order to strengthen relations with customers and improve the quality of the company's services.

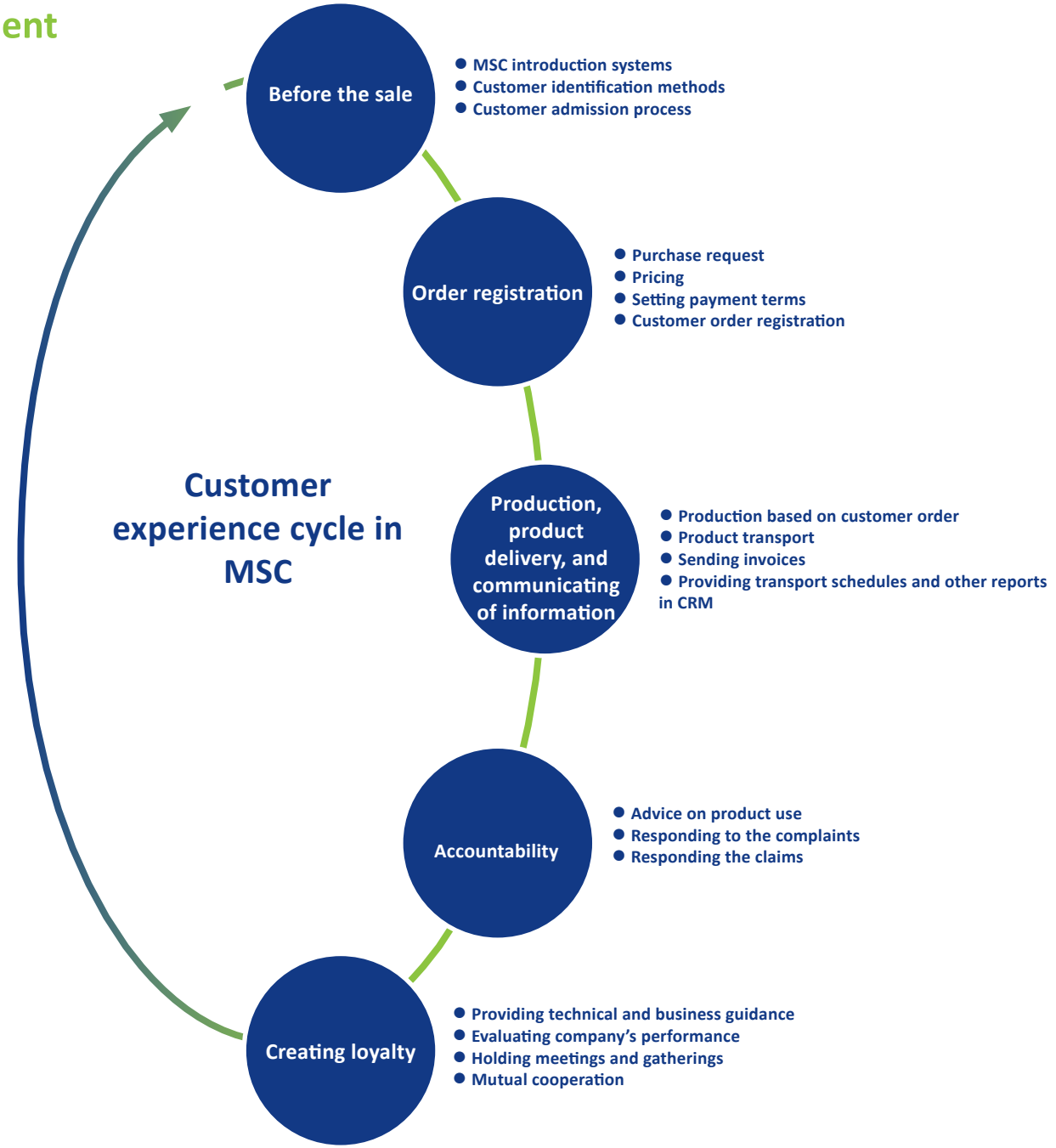
# Customer Experience Management

MSC, as a leading company in the country's industry, uses new approaches to take stable steps in the path of sustainability. One of the approaches taken by MSC to improve customer experience and loyalty is customer experience management. For this purpose, a project with three stages (1.evaluation and redesign of customer experience management model, 2.implementation of customer experience management and 3.measurement of customer experience management) has been implemented. According to this approach, various measures have been taken to improve and enhance the experience of customers at the points of contact and their interaction with the company. These measures include development of competence and authority of employees, development of customer awareness system, periodic visits to customers, development of CRM system, establishment of management systems, etc.

Customers' trust and confidence in MSC, the company's flexibility in meeting their expectations, and ease of access are among the most important indicators of customer experience. Also, the company's brand management project is being implemented with benchmarking the world's top companies, especially in the steel industry, to create the best experience for customers and its management.

Customer experience management steps in MSC Company include the following:

- Evaluation and redesign of the customer experience management model
- Implementation of customer experience management
- Measurement of customer experience management



# Sustainable supply chain

In the economy, steelmaking is referred to as one of the key and mother industries. These industries have a special place in the literature of sustainable development because they not only have a significant impact on government revenues, private sector investments and social development planning, but also cause the formation and growth of various businesses in the upstream and downstream of the steel value chain. Being aware of the role of itself and its suppliers in the steel value chain, MSC is trying to not only achieve the satisfaction of its stakeholders by maintaining a win-win relationship with capable domestic suppliers, but also lay the groundwork for social and economic justice at the national and local levels.

## Supply approaches

MSC suppliers are divided into four main categories based on the two criteria of "complexity and difficulty of purchase" and "Monetary value of purchase" and communication strategies with each of them and related supply approaches are determined. The criterion of complexity and difficulty of purchase is measured with components such as the importance of the product and the ability to replace the supplier, and the criterion of purchase value is also obtained by measuring the components of the value of purchased goods and services.


Classification of suppliers and communication strategies

**Categories of goods group and appropriate strategies to deal with suppliers**

| Supplier segment | Communication strategy | Level of partnership | Group of good |
|---|---|---|---|
| Strategic | Family | Simultaneous partnership | Iron concentrate, pellet, water, graphite electrode |
| Bottleneck | Friendship | Coordinated partnership | Oxygen probe, thermocouples, abrasive stones, specialized bearings, conveyor, etc. |
| Leverage | Business partnership | Partnership at cooperation level | Electricity, natural gas, rail transport, etc. |
| Routine | Transactional | Transactional | Pump, limestone, chemicals, some refractories, tint-metal, etc. |

| Raw materials and energy supplied | | | | | |
|---|---|---|---|---|---|
| **Type** | **unit** | **2019** | **2020** | **2021** | **2022** |
| Iron concentrate (bought) | million tons | 6.74 | 7.45 | 6.10 | 8.25 |
| Pellet (bought) | million tons | 3.82 | 4.57 | 4.37 | 4.50 |
| DRI and briquette (bought) | million tons | 1.44 | 1.38 | 1.62 | 2.70 |
| limestone (bought) | Ton | 495,346 | 497,281 | 408,000 | 466,232 |
| limestone (produced) | Ton | 347,205 | 388,130 | 346,982 | 303,363 |
| Iron scrap (bought) | Ton | 194,186 | 222,343 | 302,465 | 583,000 |

## Supporting SMEs in the supply chain

Small and medium-sized enterprises in the supply chain of MSC also provide sustainable goals such as economic and social development, employment, agility and transparency in the economy and flexibility, and set the wheels of sustainability in motion. Accordingly, MSC supports small and medium businesses in order to create and maintain a sustainable supply chain.

**Employment**

**SMEs with low capital and high efficiency have the ability to create jobs.**

**Economic agility**

**SMEs with a reliable ability to attract private sector capital will reduce government owned enterprises and increase agility and transparency in the economy.**

**Flexibility**

**SMEs have the possibility of diversity and flexibility in industrial production and increase the industry's ability to align with market needs.**

**In MSC, supporting SMEs is a tool to move towards sustainability**

# Empowerment of suppliers

MSC deploys different approaches to empower its suppliers, among these approaches, the following can be mentioned:

**1. Open and long-term contracts:** to purchase items such as safety equipment, shoes, and wrapping paper
**2.Technical and knowledge support:** to train contractors and provide manufacturing technical information
**3. Financial support:** for barter, increasing advance payment, entering into a guaranteed purchase contract, investing and buying shares or increasing capital in value chain companies.
**4. Multilateral cooperation:** to use the free capacity of companies and create a consortium
**5. Choosing a quality control inspector**
**6.Localization of equipment:** through the multilateral cooperation of major steelmakers in order to empower domestic companies

In addition, measures such as the amendment of technical documents and product information, support for knowledge-based companies and the development of relations with universities through bilateral contracts have been carried out in order to improve the approaches of empowering suppliers.

## Examples of supplier empowerment

**Concluding open and long-term contracts** with manufacturers of lubricants (such as Behran, Iranol, Naft Pars and Fuchs Iranian companies), thermocouples (such as theDaftar Kole Kala Industrial Co.), carbon magnesite brick (such as Pars Refractory Products, Nasuz Kashor and Mehrgodaz), paint (such as Goharfam and Partofam Industrial groups), shoes (such asPayara Shoe Co.), sodium hydroxide and acid (such as Nirouchlor Co. and Chloran Chemical Production Co.), special shapes (such asZagros Special Refractories), packaging papers (such as Naqsh-e Jahan Co.), work clothes (such as Shamim Baran Espadana Co.)
**Multilateral cooperation** with HOSCO regarding the transfer of technical knowledge, with Chadormalu mining & Industrial Co. regarding the production of graphite electrodes, and with Esfarayen Steel Co. regarding the production of special steel products

# Supplier identification and evaluation approaches

MSC has created a system to identify and evaluate suppliers. In this system, suppliers first announce their cooperation and after registering in the SRM system (supplier relationship management system in MSC portal), they are checked by the expert team. According to the initial evaluation checklist which is designed based on financial, commercial and technical criteria, the capabilities of the suppliers in the field of their specialized activities are evaluated and if they are acceptable, they are included in the vendor list and the report is submitted to the supplier company. In case of non-approval, the company will be notified of the reasons for rejecting the application.

Feedback from this evaluation is used in the selection of suppliers in inquiries and tenders. The selection of suppliers in inquiries is evaluated based on criteria such as the quality and number of discrepancies of delivered goods in their past contracts, timely supply, and technical capabilities for all existing suppliers in each field of activity. Also, the evaluation of the selection of suppliers in all procurement tenders is done based on two methods of two-stage and one-stage tenders (evaluation in the technical and commercial committee).

| The number of MSC suppliers (local and non-local) | Total number of suppliers | | | | Number of active suppliers | | | |
|---|---|---|---|---|---|---|---|---|
| | 2019 | 2020 | 2021 | 2022 | 2019 | 2020 | 2021 | 2022 |
| Number of suppliers of Isfahan geographical area | 4,675 | 4,894 | 5,023 | 5,150 | 1,127 | 1,173 | 1,178 | 1,050 |
| Number of suppliers of other geographical areas | 6,810 | 7,119 | 7,362 | 7,719 | 1,082 | 1,174 | 1,191 | 1,146 |
| Total | 11,485 | 12,013 | 12,385 | 12,869 | 2,209 | 2,347 | 2,369 | 2,196 |

# Choosing the right business partners

High-quality and accurate evaluation in order to choose the right business partners is one of our approaches in the path of sustainable business. Considering this importance, MSC suppliers are evaluated in the fields of goods and services. In the field of goods suppliers, the evaluation is based on criteria such as the promise of goods supply, the quality of the supplied goods and the percentage of responses to inquiries. In the field of service providers (contracting), the evaluation criteria and their weight percentages are different in each field of work activity. Each supplier is assessed in this area on the basis of assessment criteria, e.g. technical and specialised capability, capacity for supply of needed goods or tools, ability to meet employees' time demands, etc. These shall be rewarded with scores. Suppliers can find out their score in the "Performance Evaluation Records" section of the SRM system. In addition, MSC suppliers and contractors are evaluated based on criteria such as health, safety and environment (such as HSE performance and optimal energy consumption) as well as social (such as ensuring respect for employees) within the framework of the contract.

The suppliers applying for cooperation complete their information in the SRM system and after evaluating the documents, they will be evaluated in person (and in special circumstances, in person and through video conference). The evaluation of active suppliers is also done through selection and performance evaluation approaches, according to their supply performance and the results of the minutes of the technical and commercial committee. The evaluation of the performance of all MSC suppliers is done separately for suppliers of goods and services. The evaluation of the performance of the goods suppliers is done automatically and systematically every 24 hours based on the criteria related to faithfulness to promise, quality and performance in Inquiry. For service providers (contractors), performance evaluation is done in defined periods (90 days) and its results are recorded in the system.

Currently, service providers are classified in 14 specialized areas of activity and separate evaluation questions are set for them. These approaches help us to choose the most competent and capable suppliers to accompany us on the path of sustainability, along with providing equal opportunities for cooperation.

**Evaluation criteria for suppliers of goods**

| Criterion | Weight |
|---|---|
| Punctuality in supply of goods | 40 |
| Quality of supplied goods | 40 |
| The percentage of responses to inquiries | 20 |

**Evaluation criteria of service providers**

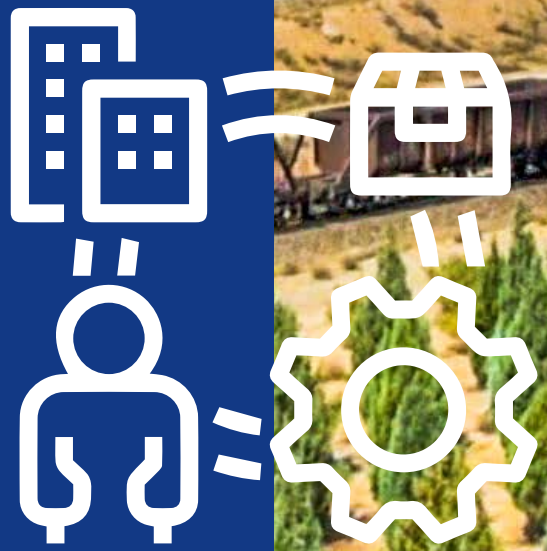
| Criterion | Description |
|---|---|
| Organizational Structure | Competency of employees, employee specialization, the use employee specialization, compliance with safety, health, and environmental standards, etc. |
| Work management | Timely procurement of equipment, product health control, market recognition, determination of customs tariffs, quality of guidance and training, etc. |
| Financial Capacity | regular and correct presentation of financial statements, timely payment of personnel salaries, ability to afford the costs of the contract |
| Time Management | Appropriate time of order registration, appropriate time of clearance, appropriate funds, etc. |

### Controlling safety, environmental and energy efficiency requirements in monitoring suppliers' performance

Safety requirements are communicated through product Material Safety Data Sheets (MSDS) along with the order to the suppliers of safety and environmental goods (such as covering the surface of the truck loaded with iron ore/how to package and ship the oils according to the relevant instructions). Also, for goods with an obvious energy aspect, in the purchase request, the energy characteristics of the goods are also taken into account (such as electric motors).

# Supplier Relationship Management (SRM)

MSC uses several approaches to communicate with suppliers and meet their needs. For example, by using a supplier relationship management system (SRM), the company can interact better and more effectively with suppliers. This system has different sections that include registration of electronic self-declaration questionnaire and its update, inquiry information, tenders, orders, financial information records, performance evaluation records, internal bill of lading registration, suggestions, surveys, Invoice issuance, specialized reports on product quality control and obtaining performance certificates. Through this system, suppliers can track their issues without being physically present in the company and get the latest information about contracts, evaluation status, their points, financial statements, etc. Training sessions have also been held for active suppliers in different fields of work, and in these sessions, how to register and use the facilities of the SRM system is explained to them. Also, a user guide has been placed in the system for the use of suppliers. Through this system, as well as SMS, a survey was conducted from the suppliers, and in addition to measuring their satisfaction, their suggestions and opinions are also recorded.



# Localization of materials, parts and equipment

One of the ideals pursued by the founders of MSC since the beginning of its establishment has been to build and develop the industry and the country as a driver of industrial and economic development. In this respect, MSC has always played an important part of supporting other industries in the country both upstream and downstream the steel value chain. From this perspective, it is only through the establishment of an infrastructure and platform for production of consumables, replacement parts and equipment required by manufacturing lines that MSC can be localized. For this purpose, in the process of supplying of company, purchase requests are observed and prepared with the lens of localization. The localization process is a collaborative process and is carried out with the focus of the localization unit and the cooperation and participation of the production, maintenance and support units of MSC as well as manufacturing and knowledge-based companies.

MSC's approach in localization is to empower domestic manufacturers to commercialize and complete the portfolio of products required by the steel industry, which ultimately leads to the creation of companies with Iranian trademarks for those products. In order to preserve and continue the production of these products, as well as the survival, durability and market development of their manufacturers, localization knowledge and successful experiences in this field are transmitted through the premises created by MSC and IMIDRO (Iranian Mines and Mining Industries Development and Renovation Organization), such as Karlink System and MSC Localization Site. According to the latest statistics in 2022, in terms of amount, more than %92 of the purchase budget and purchase orders were provided from within the country, and also in terms of the number of goods, less than %15 of the purchased goods were provided from foreign suppliers.

**Steps of localization of materials, parts and equipment**

| Steps | Approach |
|---|---|
| Reviewing requests | Collecting documents and records and forming a request localization team |
| Preparation | Identifying, negotiating and evaluating manufacturers and codifying the special conditions and terms of requests |
| Carrying out the comercial procedure | Send tender documents or inquiries to manufacturers |
| Technical review and analysis of submitted responses | Matching the terms of the technical proposal with the request requirements and finally selecting the manufacturer |
| Controling of manufacturing process | Participation and sharing knowledge and experiences of the localization team with the manufacturer in the stages of engineering and manufacturing and finally quality control of the product in order to send it to MSC |
| Hot test | Ensuring the correctness of the localization process |
| Preparation of Final Book | Compilation of documents and maps to repeat subsequent purchases with the internal manufacturing process |

## Supporting knowledge-based companies

Supporting knowledge based companies and technology development in the country is one of the approaches of MSC in the field of localization and it is one of the objectives of the its sustainable business path. To that end, the company has been holding specialized meetings with known Knowledge Based companies and is facilitating their entry on its vendor list. Knowledge-based companies that are selected to join the group of MSC suppliers will cooperate with the company in specialized fields with the aim of acquiring technical knowledge in designing and manufacturing materials, parts and equipment, and further commercializing and completing the product portfolio, and finally innovating and improving technology in product production. In the past year, MSC has signed an agreement with Isfahan Science and Technology Town (ISTT) in order to use the power of domestic and knowledge-based manufacturing companies. The number of knowledge-based companies registered in the list of MSC suppliers is 831 companies, of which 450 companies have been evaluated for entry and have received a supplier code and the rest are undergoing technical and specialized evaluation.

## Localization in MSC from the point of view of statistics

- The importance of localization within the MSC is well known, and April 21 has been named as the beginning dateof localization in the Company's calendar of events.
- Localization of more than 8,900 parts and equipment for the first time in the country (from 2013 to the end of 2022) and also the increase of %32 of the share of domestic manufacturing (from %60 in 2011 to %92 in 2022) are the results of the localization process, which they have brought to MSC the stability of supply and removal of threats of sanctions, reduction of procurement time and saving of currency while maintaining quality. At present, more than %90 of the required items of company are supplied from within the country.
- More than %95 of the refractory materials of MSC are localized and supplied from Iranian companies, and plans have been defined and are underway to supply %100 in cooperation with universities and knowledge-based companies.
- Since its launch, more than 100 thousand parts have been localized in MSC.
- Alocating 5000 billion Tomans to the country's knowledge-based companies for localization in 2022 was among the other actions in this field.

### Localization in Mobarake Steel Group

Since localization can lead to an increase in the quality and capacity of production and reduce the dependence on foreign suppliers to a significant extent, it can lead to the prosperity of production and job creation, it is important to expand it to MSC Group companies. In this direction and in order to align the localization process at the level of MSC Group, the following measures have been taken:

1. Transfer of localization technical knowledge at the level of group companies
2.Establishing communication between the localization specialists of MSC and other localization units in the group companies to meet the daily needs related to this field.
3. Revision of the localization process in order to integrate this activity at the level of MSC Group with the aim of aggregating needs and encouraging manufacturing and knowledge-based companies to invest and acquire technical knowledge of high-tech parts and equipment, as well as generalizing this process to all purchasing departments of MSC Group.

By the end of 2021, more than 7,600 spare parts and equipment were localized and manufactured domestically for the first time by capable domestic or knowledge-based companies. These achievements are the result of MSC's approach towards the continuation and strengthening of the localization movement.

### Localization in the management of consumables

The biggest goal of localization has always been to cut off the dependence of domestic industries on foreign sources, and along with that, creating employment and strengthening the power of domestic producers has always been considered and still is. In this regard, MSC, while identifying susceptible units in the field of localization and encouraging such units, toward the preparation of their raw materials, including refractory materials, oils, lubricants and chemicals and molten steel additives from their domestic producers have taken a long step toward cutting off dependence abroad and promoting localization in the country and the steel industry.

# Engagement of suppliers in product quality development processes

Considering the importance of producing high-quality products in the path of sustainable business and in order to be successful in the market, MSC, by creating a partnership platform in order to increase product quality, mutually use the expertise, resources and knowledge of suppliers and create motivation for providing quality, timely and stables goods and the service uses every opportunity to engage with suppliers. For this purpose, MSC uses different approaches.

MSC Sustainability Report, 2023

# Mutual cooperation to improve processes and add value to the customer-supply chain

In order to create added value in the supply-customer chain, MSC uses different approaches to support, empower and develop cooperation with its suppliers.

**Approaches to mutual cooperation with suppliers and business partners**

| Approach | Cooperation method | samples |
|---|---|---|
| Providing financial resources for suppliers | • Barter<br>• Increasing prepayment<br>• Guaranteed purchase contract<br>• Long-term contract | • Barter of refractory wastes with calcium aluminate<br>• Purchasing a part of Azar refractory shares<br>• Investment in manufacturing graphite electrode<br>• Guaranteed purchase of rolling oil from Beh Arian Co .and CHEMICIS<br>• Allocation of the site and provision of part of the capital for the calcined lime briquette factory construction<br>• Processing of cold slag through the construction of a factory by the method of build-operate-transfer (BOT contract) through Danesh Pardazan Atiyeh Co. |
| Training of contractors | • Provision of the required training according to international standards | • Providing HSE training for all suppliers and contractors present at MSC |
| Multilateral collaborations | • Trilateral cooperation with the presence of customers and partner companies aimed at producing special products<br>• Requiring capable domestic companies to form consortia to promote and use each other's potentials | • Long-term cooperation with Oxin Steel Company<br>• Establishing an agreement between MSC and alloy steel producers (Esfarayen Industrial Co. (EICO) and Iran Alloy Steel Co.) in order to pre-produce all the alloy materials needed to make spare parts and equipment, facilitate and accelerate the supply of these materials for parts and equipment manufacturers.<br>• A consortium between IRASCO, Kavosh Joosh and Prosimet of Italy to produce mold powder<br>• Carrying out a research project, designing and building a system for inspecting and detecting impurity of incoming shipments to MSC by Isfahan Science and Technology Town (ISTT) through Behiar Sanat Co. |
| Increasing the quality of supplied goods | • Selecting a consulting company for quality inspection of manufacturers and producers | • Contract with Sepid Abzar Daqiq Co.<br>• Contract with IKA Engineering and Technical Inspection Company<br>• Contract with Azmooneh Foolad Co.<br>• Grouping of inspection companies based on the sensitivity of spare parts and revision of contracts of inspection companies |
| Technical and knowledge support from suppliers | • Provision of technical information during manufacturing<br>• Dispatch of suppliers' technical teams abroad<br>• Technical consultation contract | • Dispatch of joint supplier and business teams to manufacture transformers and slag ladles<br>• Technical consultation agreement with Rahboard Farayand Dana Company to replace the tin coating gauge<br>• Contract with Adib Tarh Arian Co. for the preparation of technical documents for the manufacture of mechanical parts and repair manuals<br>• Contract with the Part Retech Co. for the preparation of technical documents for rotating parts and power transmission machines<br>• Contract with Arman Sepahan Design Co. to prepare specialized data sheets for item catalog parts. |

# Circular economy

The step-by-step movement from the linear economy to the circular economy is one of the actions of MSC to continuously move in the path of sustainability. If in the linear model, products are produced from raw materials and then discarded, in the circular economy it is possible that the products are entered in the economic cycle in four ways of reduce, remanufacture, reuse and recycle. MSC has compiled its circular economy roadmap with a view to this concept and defines and implements measures.

**Focus areas and main pillars of MSC's circular economy roadmap- cont'd**

| Focus areas | Definition of focus areas | Main pillars |
|---|---|---|
| **Organizational culture and ecosystem** | Improving employees' awareness of circular economy principles, institutionalizing circular economy concepts in the company by redefining work practices, policies and implementation methods, developing partnerships in circular economy issues with partners in the business ecosystem. | • Training and improving the skills of employees<br>• Knowledge sharing, cooperation and joint investment<br>• Influencing the ruling policies at the regional and national level<br>• Redefining working methods, policies and implementation methods to institutionalize circular economy principles in the organizational structure<br>• Supporting innovative ideas and active start-ups in the field of circular economy<br>• Replacing/using new technologies with circular economy orientation |
| **Supply chain** | Using raw materials, consumables and non-consumables/parts and equipment and selecting suppliers according to circular economy principles (consumption of water, energy, less materials, production of light but durable parts, reuse of products or system components, longer life cycle, less pollution, facilitating recycling), helping to promote supply chain business partners in circular dimensions. | • Providing quality and environmentally friendly materials (material/consumable/equipment and non-consumable parts).<br>• Putting green suppliers in the top priority (responsible sourcing)<br>• Empowering suppliers (training, counsulting, financial incentives)<br>• Defining joint projects, technical cooperation with suppliers |
| **Green steel products** | Designing and developing innovative products and new more strength steel grades and consume less resources. Rethinking the design, life cycle and end of life of products and services to optimize use, eliminate waste and close the product cycle. | • Increasing the life/ strength of products<br>• Product design with the aim of reducing waste in downstream production processes<br>• Reduction of consumables in production<br>• Supplying materials needed for green products<br>• Cooperation with customers in improving the life/value/variety of uses/recycling at the end of the life of the final products |
| **Recycling and waste** | Recycling waste and by-products in steel production processes and other non-process waste in the form of on-site recycling (such as extracting iron and other ferrous compounds from slag and reuse of metal-based waste) or selling to third parties for processing and recycling (such as using slag in cement production, construction projects). | • Reducing disposal or landfill of waste and by-products<br>• Recycling and upcycling of the outputs of the production areas and also other support departments<br>• Finding recycling opportunities in other industries and expanding ecosystem partnerships<br>• Acquisition of knowledge and new technologies of recycling |

**Focus areas and main pillars of MSC's circular economy roadmap**

| Focus areas | Definition of focus areas | Main pillars |
|---|---|---|
| **Water** | All activities in the field of minimizing the water consumption in the steel production and cooling process, reducing dependence on non-renewable resources, recycling and reusing water, and zeroing the treated waste water left in the nature. | • Providing the required quantity and quality of water from sustainable sources and diversifying water supply sources<br>• Reduction of incoming water<br>• Purification and recycling of water and reuse of water in the production process<br>• Treatment and use of urban waste water<br>• Reducing water consumption in production processes and production wastage |
| **Energy** | A set of measures to manage and reduce energy consumption, increase operational energy efficiency and transition from fossil fuels to renewable sources. | • Increasing energy efficiency<br>• Thermal energy recovery<br>• Substitution of renewable energies and fuel change<br>• Replacement of production technologies to reduce energy consumption<br>• Reducing the dependence of energy carriers on the national grid |
| **Atmospheric pollutants** | Identifying the emission points of GHGs and local pollutants in the area of main operations as well as throughout the supply chain and taking appropriate measures to reduce them. The reduction of emissions resulting from the supply of energy required by the company's operations from fossil energy carriers is under the field of energy. | • Replacement of green production technologies<br>• Optimizing transportation, logistics<br>• Increasing the share of scrap in steel production<br>• Reducing the emission of dust and polluting gases<br>• Compensatory measures in reducing the carbon footprint |

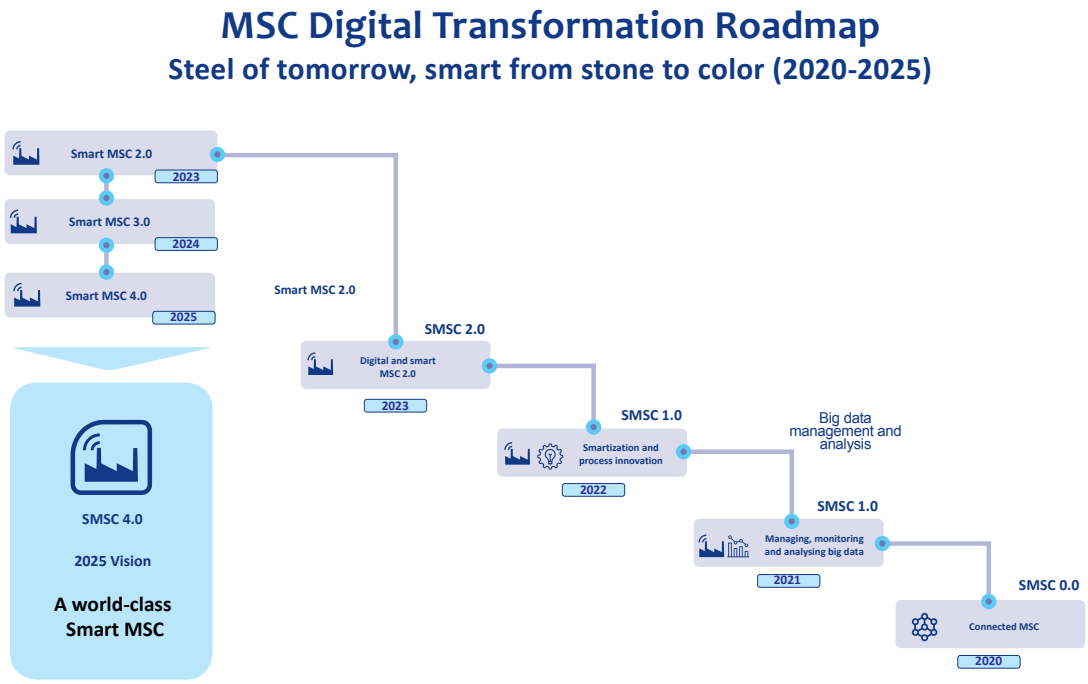
Transfer of slag for processing

# Digital transformation and smartization

## The smart path to sustainability

The state of the global economy and the effects of digital transformation and economy on it, the fourth industrial revolution and digital transformation in the steel industry are important and key issues of concern to MSC in order to realize the strategic goal of "World Class Smart MSC" in the company's strategy map. MSC started the project of "digital transformation and smartization" from August 2020 with the aim of creating new values and diversity in products, reducing their cost and providing innovative products in the country and in the world.

The main inputs for developing the "digital transformation and smartization" plan in MSC are the international trends in the industry, especially the steel industry, competitors' behavior and technological developments. In this regard, MSC has established a strategic destination under the title of membership in the "joining the Lighthouse Global Network" with the strategic direction of digital transformation, based on its value creation system and in line with the vision of "a world class company". The direction of the digital transformation plan of MSC in order to realize this strategic destination drawn with the slogan "Steel of tomorrow, smart from stone to color" in the form of a five-year journey from 2019 and with the inputs of global trends in the steel industry, existing challenges and considering technologies Key enablers of industry 4.0, such as cloud processing, artificial intelligence (AI), augmented reality (AR), virtual reality (VR), big data, blockchain, data analysis, Internet of Things (IoT), etc., have been keyed up to 2025 horizons. In order to implement this guideline, the portfolio of MSC digital transformation projects with titles such as "Creation of the communication infrastructure of the connected factory", "Deployment of the smart factory platform", "Smart logistics", "Smart estimation of refractory thickness", "Remote support with the use of augmented reality", "self-driving overhead cranes" and "tracking and calculating the volume of raw materials using drones" were formed based on the existing challenges and the requirements of the smart factory. Other innovative and major measures that have been taken to advance the digital transformation and smartization plan of MSC will be explained below.



Holding three Reverse Pitch events with start-up and knowledge-based companies in order to raise the existing challenges of MSC and receive smart solutions to solve them, receive innovative ideas and make maximum use of all the engineering capabilities of the country.


Receiving ideas and suggestions in the field of digital transformation according to the existing challenges in the form of Foladino plan in order to attract the participation of all employees of the organization


Holding training courses for digital leaders in cooperation with Isfahan University and using domestic and foreign professors with the aim of familiarizing MSC managers with the principles, foundations and frameworks of digital transformation, promoting the culture of digital transformation at the organization level and forming a common digital ecosystem for managers to create A favorable environment for the implementation of projects and programs of the industry 4.0.

Launching industry 4.0 laboratory in Isfahan University of Technology in order to create sustainable and common value as well as to create the necessary infrastructure in academic environments, to create knowledge-based networks and on the path of smartization more more successfully and more quickly.

Launching the first industrial 5G site in one of the MSC areas in order to create the communication infrastructure required for a smart factory and to create the necessary communication infrastructure platform to provide services to other digital transformation projects.


Construction of the innovation center for digital transformation of steel in the science and technology park of Tehran University with the aim of creating a start-up studio for digital transformation in the steel industry and in order to establish the innovative cores and technological companies of the country.

Participating in two national evaluation courses of digital transformation in order to measure the level of digital maturity of the organization, as well as receive feedback and expert opinions in this field and set more precise goals, and obtained bronze trophy of digital excellence level.

# Problem-based, future-oriented, and creative research and development

## Idea-oriented research and development

MSC has defined all research and development activities as knowledge-oriented as one of its main gaols. These activities are the basis of the company's cooperation and close relationship with national and international universities and research centers and scientific and research towns.

The projects carried out in the research and development department can be divided into three general categories: problem-oriented, idea-oriented and future-oriented. Problem-oriented mega-projects such as "Using hot twisting test to determine the behavior of hot deformation during rolling" and "Design and production of API X70 steel hot-rolled coil", idea-oriented mega-projects such as "Design and construction of automatic monitoring system for raw pellet granulation" and future-oriented mega-projects such as "identification and macro analysis of future trends and their impact on the business model of MSC" and "Implementation of a comprehensive strategic monitoring center in MSC Company" are the result of this approach.

## Mobarakeh Steel Technology and Innovation Development Company (MSTID)

Mobarakeh Steel Technology and Innovation Development Company (MSTID) was established in 2020 with the aim of developing the business model of MSC Group. Planning for the creation and growth of innovative businesses related to the steel industry based on new technologies is one of the executive priorities of this company, which is specifically made possible by analyzing the most important global and local macro trends affecting the country's steel industry in the short, medium and long term horizons. Trends such as the reduction of available high-grade iron ore mines, the increase in the price of energy carriers, the circular economy, the production of green steel based on the reduction of carbon emissions, and the emergence of the industry 4.0 are among the main trends of interest. For the development of innovative businesses in the steel industry, the tools of venture capital and the establishment and management of the innovation ecosystem are used based on the concept of open innovation, which aims to form a wide technical and knowledge network of technological and knowledge-based companies, innovative cores and start-ups, students, graduates and university professors.

# Fields of activity of MSTID

## 1. Development of the ecosystem of innovation in order to create innovative businesses related to the steel industry

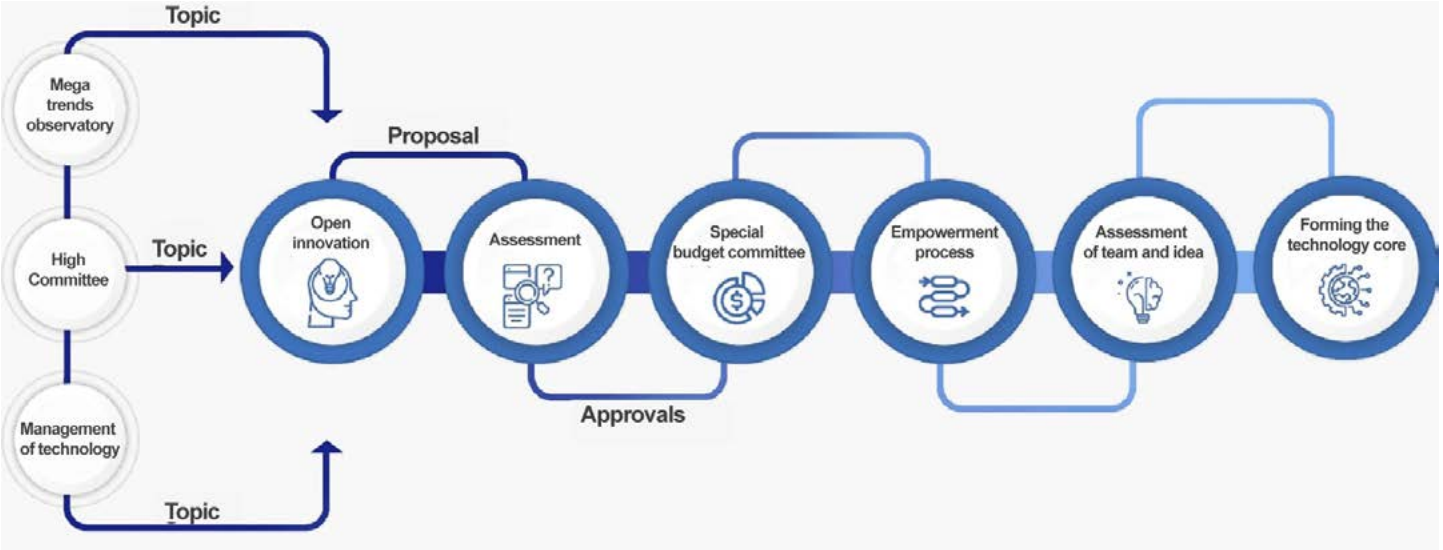
In order to create, promote and strengthen the ecosystem of innovation and technology, Mobarakeh Group as the main platform for open innovation, investing in various components of the ecosystem such as accelerators, investment funds, academic innovation centers (Innoversity), urban innovation centers (Innotechcity) and industrial innovation centers (Innofactory) are one of the important parts of the company's investment.


### Academic Innovation Centers (Innoversity)

In academic Innovation Centers (Innoversity) by empowering, encouraging students to work in groups, forming multidisciplinary teams and conducting events related to the steel industry, networking and creating communication in the innovation ecosystem of MSC will be realized. Currently, the construction of academic innovation centers has reached the stage of contracting or exploitation in 15 universities (Sharif University of Technology, Tehran university, Amir Kabir university, Shahid Beheshti university, Isfahan University of Technology, Isfahan university, Shahrekord university, Isfahan Islamic Azad university, Najaf Abad Azad university, Materials Research Institute and energy, Hormozgan university, Kerman university, Yazd university, K.N. Toosi University of technology, Imam Sadiq university).

In the academic innovation centers, by directing academic research towards the macro trends of the steel industry, while making the scientific and research activities of the universities more targeted, the relationship between the industry and the university will be directed towards the creation of technology cores and mediating institutions. Currently, the major trends in the steel industry include primary mineral resources, green steel production, new production equipment and processes, consumables, energy, processing of process waste and by-products, water, the fourth industrial revolution, and advanced steel products.

In these centers, the projects presented in the form of master theses and doctoral theses are sent to the higher committee for evaluation and budget allocation. In the high committee, taking into account indicators such as the ability to convert the project into a business, the importance of the project from the perspective of the macro trends of the steel industry, the feasibility of implementing the project, the novelty compared to previous studies and the closeness of the subject to the scientific and research records of the supervisor, the extent and manner of supporting the project will be determined. It should be noted that in case of funding for the project and in addition to research grants, trainings will be given to students residing in the innovation center to improve their individual competencies and business skills, such as knowledge and development of the business market, business laws, legal matters, as well as consulting and coaching programs will be provided. Another services of these centers is the provision of a shared work space that provides the experience of being in a startup environment, a space where many people with new business ideas are present and while strengthening the spirit of teamwork, cooperation and creativity are also developed. Technology cores will also be located in these centers. These cores are accepted teams include academic staff members, students and owners of startup and creative ideas that work towards the commercialization of research results and meeting the needs of the steel industry. Specialized accelerators are also present in this collection and they provide the opportunity to accelerate the success, growth and formation of new businesses. These accelerators operate under the support and development of technology and innovation company of MSC. It should be noted that, as the first center, the innovation center of MSC was established in Isfahan University of Technology in a space of over 1200 square meters.




Pocess of Innoversity

## 2. Venture capital as a tool for developing innovative businesses

MSTID offers various models for venture capital investment in businesses. Depending on the proposed topic, the maturity of the company proposing the project and the interest of the proposing team, one of the following seven models is usually used for this company's cooperation with businesses:

- Participation in capital increase
- A loan that can be converted into shares
- Co-investment
- Revenue and royalty sharing
- Deed of share
- Establishment of a company
- Technical knowledge development contract

It should be noted that in 2022, more than 13 venture investment contracts were concluded by MSTID (out of 150 companies and business opportunities).

**3. Development of technology and innovation in the form of a technology observatory and development of a road map**

**4. Development of new businesses to issues beyond the steel industry**

**5. Investing in accelerators and project proposal companies**

**6. Depositing in research and technology funds**

# Innovation

## Future path

One of the main concepts that is always mentioned next to sustainability is development. Although development has always been interpreted as progress and growth; But in fact, development refers to the goal of increasing wealth and improving the quality of life of individuals and society. In traditional ways, the goal of development has only been to create added value without considering the limitations of biological or social resources. Adding the concept of sustainability to development requires new approaches, which cannot be realized using previous tools and methods. Innovation is considered as one of the tools to achieve sustainable development, because innovation in processes, products and production methods helps us to produce products more efficient and more suited to the needs of society, to consider environmental limitations more realistically and to consider a solution to face them. MSC, as an economic enterprise, has a special view on innovation in the path of achieving a sustainable business. Because transformation is based on innovation. One of the goals of MSC is to transform Isfahan province into a hub of innovation and technology in the country. Data shows that Isfahan has a significant population of educated people. In addition, due to the establishment of various industries in this province, Isfahan is considered one of the country's industrial hubs. Despite these opportunities, it is necessary to help Isfahan to become the country's technology hub by investing in innovation. Also, we have not forgotten that the reduction of production emissions depends on the use of new technology and innovative production methods.

But innovation without localization will be a difficult and far-fetched process. Localization not only leads to job creation, cost reduction, foreign currency income and national self-esteem, but also helps us to know the ways of manufacturing and producing products and improve them according to the needs of the target society. Localization, along with significant economic savings, provides the necessary awareness to recognize the points that need improvement.

If we look at the history of MSC, 40 years ago, for the formation of this company, a significant part of its equipment was provided from abroad, and about 1,500 of its employees were trained to set up in foreign countries. But today this economic enterprise has reached over %90 self-sufficiency in the internal supply of equipment and is trying to develop innovation. We believe that the continuation of this process will guarantee the growth and progress of MSC, the industry and ultimately the country; In the coming years, the country's steel industry will not benefit from many of the current advantages for steel production, therefore, one of the most important steps of MSC in the path of sustainability is to value transformation and innovation, because the foundation of sustainability is based on flexibility and transformation in line with changes in the external environment. In this regard, MSC, by bringing together 400 knowledge-based companies from all over the country in Isfahan province, seeks to realize great and important events in order to turn this province into the country's innovation hub.

# Future path

MSTID has organized more than 9 different events in the country in 2022, among these events, we can mention the festival and national event of "Future Path" which was held in March 2022 with the presence of the scientific deputy technology and knowledge-based economy of the I.R. Iran's president, a group of high-ranking officials, managers of the steel industry and 300 technological and knowledge-based companies from all over the country were held at Isfahan University of Technology and Isfahan Science and Technology Town (ISTT), and the innovative strategies and policies of MSC were unveiled. The main actions taken in this event include the following:

1-Unveiling of MSC's Technology and Innovation Ecosystem Development Document

2- Cooperation with the Islamic Azad University, Najaf Abad Azad University, to establish a science and technology park and establish 58 units and a technology company

3- Opening of MSC Innovation Center in Isfahan University of Technology

4- The signing an agreement between MSC and Isfahan Science and Technology Town (ISTT) in order to comprehensively develop the localization of items needed by the steel industry and save three million USD in foreign exchange in the near future.


Future path event


MSC's innovation center at Isfahan Univerity of Technology

# Path of engagement and companionship with society


“We always consider ourselves committed and responsible for solving problems and challenges alongside society”

# Supporting local communities

For MSC, sustainability is not only limited to environmental and economic aspects, but also the social dimension of sustainability and local communities are very important as constant companions and supporters of this company on the path to create a better future. For this reason, MSC's agenda includes plans for engagement and companionship with local communities, as well as their support and development. These programs are implemented based on the company's planning process with the following steps:


Operational plans and measures taken based on the aforementioned planning process are divided into four general categories.


Since the establishment of the company, we have sought to establish a mutual win-win relationship between the steel industry and society (particularly the local community). Receiving a certificate of appreciation and a Iran›s Management Social Responsibility Award in 2018 ,2016 and 2021 reflects the significant attention of the company to social responsibility.

# Social and human development

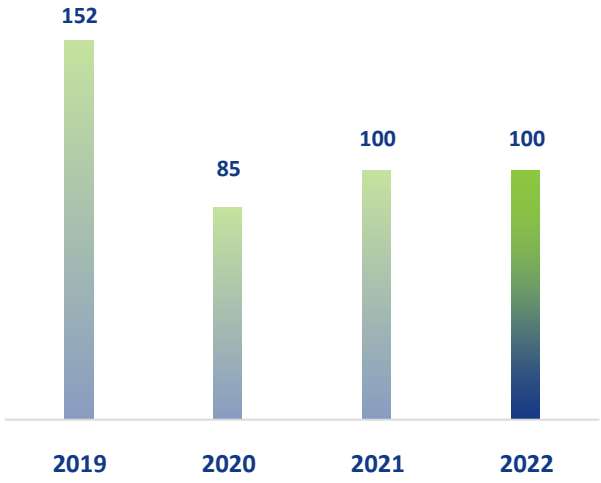
Social and human development is one of the important areas and operational plans of MSC in order to support local communities. From the beginning of the establishment of MSC, the development of the region and the country, along with the development of the factory, has always been considered by the leaders of the company. It should be noted that local communities are geographical areas where the main activities of the company are located in these areas or occur in their vicinity. In fact, MSC participates in the development of local and national communities in order to achieve the position of a responsible company for creating better futures. As one of the largest industrial companies in the region, MSC Company feels more responsible towards them by providing its resources from local communities and has targeted plans for their development in its agenda. Some of these plans, which are the result of the company's planning process, are:

## Participation in the construction and development of cultural, educational and scientific centers

- Participation in the construction of Golestan Hall of Cemetery of Martyrs of Isfahan
- Participation in the construction of the Central Hosseinieh of Mobarakeh
- Supporting Quranic centers including Bayeneh Institute and Mahd-e Velayat Quranic Institute in Isfahan city
- Participation in equipping the Holy Defense Museum of Isfahan province (Museum of 8 year imposed war of Iraq against Iran)
- Construction of 29 educational centers in all grades
- Participation in the construction of Farshchian School of Art in Majlesi city
- Participation in equipping School of Arts in Mobarakeh city
- Participation in the reconstruction of educational centers in Mobarakeh city
- Financial assistance to the headquarters for the reconstruction of the provincial capitals

## Developing relationships with community representatives and regional and national officials

MSC takes measures in order to promote engagements with communities and their representatives. Holding regular meetings with national, provincial and regional officials (for example, meetings with the administrative council of Isfahan province and the region, which are held on a monthly basis), is an example of these measures in order to establish continuous and effective communication with community regional and national representatives and officials. The effective interactions between the officials of the region and MSC in the direction of developing the region's infrastructure and optimizing the company's assistance is one of the main results of this approach.




Number of periodic and occasional meetings with officials and community representatives

## Participation in the development of the local and national economy

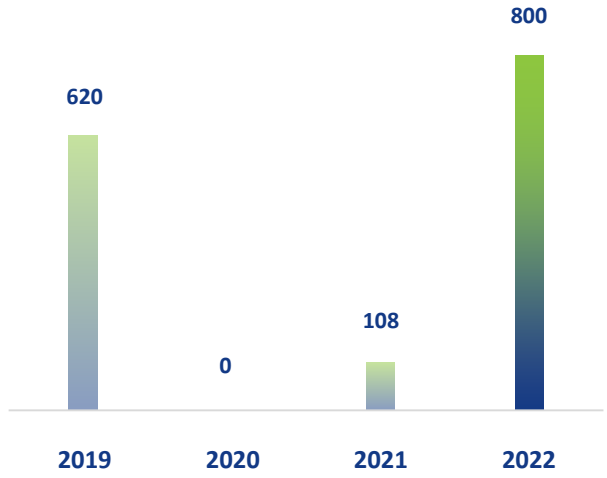
MSC was established with the aim of creating employment and improving the economic and social situation of the region and the country. For this purpose, the company participates in the development of the local economy by creating direct and indirect job opportunities in the region, providing economic and financial resources from it, providing products and services from local suppliers, developing the social context, creating economic prosperity and consequently increasing the local per capita income. In addition, MSC through the use of raw materials and services (through more than 2000 active suppliers in the geographic region of Isfahan and other geographical regions of the country), production of intermediate products in the industry (for more than 1000 factories directly and more than 3000 Factory and workshop indirectly), transportation of raw materials and products by using the logistics capability of the region and providing domestically manufactured spare parts, participates in the development of the national economy. On the one hand, this participation has increased the national income and on the other hand, it has increased employment in the region, province and country. It is worth mentioning that MSC has a share of about 1.5% in the country's GDP and 5% in the industry sector.


Indirect employment in the upstream and downstream services and industries across the country


Direct employment
(In Mobarakeh Steel Group)

## Admission and training of apprentices

In order to fulfill its social responsibilities, MSC Company has designed and implemented a system to accept university interns from all over the country. Based on this approach, every year a number of university graduates are evaluated and recruited for internships and training in the company, and while receiving the necessary training, they get to know the work processes at MSC and take advantage of the opportunities provided to put into practice what they have learned in the theoretical field. Also, in the last few years, it has been tried to improve the quality level of internship. Although the recruitment of interns reached zero during the corona virus epidemic, the number of interns recruited in 2022 has reached 800 people.




The number of interns accepted

## Membership in professional associations and supporting of conferences

MSC is one of the largest producers of steel products in the country, that is why it is included in many scientific and industrial associations such as the Worldsteel Association,Iron & Steel Society of Iran, Research Association of Iron and Steel Producers of Iran, Iranian Society For Human resource management, Chartered Institute of Personnel and Development (CIPD), and Isfahan Science and Technology Town (ISTT), etc. have effective membership and participation.

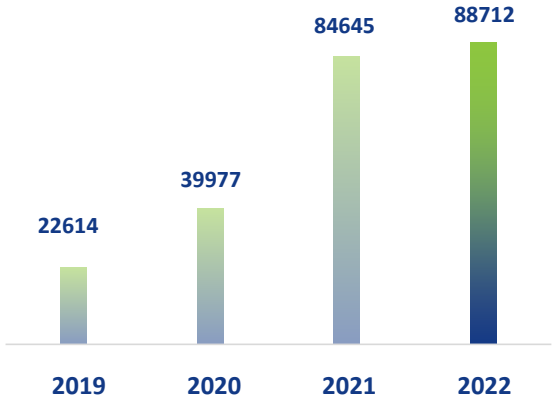
worldsteel ASSOCIATION

## Relationship with universities and research & educational centers (governmental and non-governmental)

MSC is related to more than 130 universities, research centers and knowledge-based companies in the process of managing research and development activities through concluding research contracts or supporting student projects. Also, with the aim of promoting and developing technology, creativity and innovation, it has been continuously and effectively present at the National Sheykh Bahai Technopreneurship Festival (thirteen times). In 2016, by participating in the “Nesha” project (the starting point of communication between investors and large organizations with technologists and owners of investment opportunities), he has actively participated in creating an atmosphere of interaction between investors and idea makers. Also, since 2016, by revising the research and development document of the company with the approach of open innovation and commercialization, it has developed its field of activities from problem-oriented to open innovation (idea-oriented). In this regard, the creation of a research and technology fund, the establishment of the Mobarake Steel Group innovation center, the establishment of a digital transformation innovation center in the steel industry with the participation of the University of Tehran and the scientific vice president of technology of I.R. Iran and investment in the construction of its physical space, the establishment of a steel research institute and the establishment of a research company and Sahand technology of the Middle East is on the agenda. For this purpose, various idea generation events such as Reverse Pitch, Fan Bazaar and INNOMINE 2 have been held at the Steel Industry Localization Exhibition and National Seminar on Surface Engineering. Scientific presence and cooperation in the preparation of specialized and scientific journals are other activities of the company with the collaboration of scientific and research associations and centers.


## Payment of legal duties and taxes

The company fulfills all its legal obligations (including the payment of duties, taxes, and other legal payments) in a timely and complete manner in line with its social responsibility.




Total types of taxes and legal duties (Billion Rials)

# Supporting the charitable foundations and NGOs

MSC has several operational plans to help the disadvantaged groups and vulnerable sections of the society in different ways. In this regard, in addition to helping these groups, the company also supports charitable foundations and popular organizations such as the Imam Khomeini Relief Foundation and humanitarian organizations (NGOs). All payments and contributions to ensure the social responsibility of MSC are made based on the requests received from the regional officials of the province and the engagements that are carried out. For this purpose, after review, the cases are prioritized by the company's public relations and payments and assistance are made based on the existing workflow and with the approval of the CEO and the company's board of directors. Some of the most important contributions made in this field are:

- Preparation and distribution of cultural packages in 2021 in order to support the needy students of the province, which has been done by MSC in the last few years.
- Donation of 1600 tablets to underprivileged students of Isfahan.
- articipation in the ceremony by Isfahan Province Atonement Headquarters and assisting in the release of unintentional crime prisoners
- Helping victims of natural disasters such as earthquakes and floods, for example, the Khoi earthquake in 2022.
- Assistance to supporting institutions such as the Imam Khomeini Relief Foundation and tate welfare organization of Iran, etc. and participation in different charity programs such as Shekoufeha ceremony, Atefeha ceremony, Sin-e Sekhavat etc.
- Participation in the synergistic plan with the provincial aid committee to provide 200 sets of dowry for young couples, 500 sets of essential household appliances for families.
- Completion of 100 residential homes for the Imam Khomeini Relief Foundation's clients in the province.
- Providing relief to the snow-bound villages of Chaharmahal and Bakhtiari province and the west of the Isfahan province (providing household packages and reopening roads) in 2022.

**Number of donations and contributions to the community**

| | Number of donations | |
|---|---|---|
| **Category** | **2021** | **2022** |
| social | 38 | 51 |
| Educational | 13 | 14 |
| Civil | 40 | 38 |
| Cultural | 36 | 147 |
| Sport | 7 | 24 |
| Health | - | 18 |

## Sofreh Hamdeli event

We believe that people will stay away from each other without understanding and recognizing each other's pain, and it will be difficult and impossible to follow the path of sustainability. Fasting helps people to experience the living conditions of others in a short period of time, to know their wants and needs, and of course to practice abstinence as a step to deal with consumerism.The "Sofreh Hamdeli" event was held in order to help people experience this duty.

- Distribution of 1000 livelihood packages.
- Holding iftar (breaking the fast ceremony in Ramadan) for orphans.

# Helping victims of natural disasters

As a responsible company and a pioneering business, we at MSC consider ourselves obliged to help the people who are injured and need help in times of crisis.

## Helping the earthquake victims of Khoi city

In February 2022, after the Khoi earthquake, the employees of MSC started to form rescue groups to help the affected people. Based on our previous experiences during the floods in the west and southwest of the country, the Yasuj earthquake and the earthquake in the west of the country, we knew that the livelihood packages, cold food and other items, although they meet the needs of the affected people, are clear signs of a major crisis. Therefore, we decided to take a step beyond the previous experiences and, in addition to responding to the basic needs, reduce some of the mental pains of these affected people. The smell of fresh bread and the taste of hot food have always been interpreted as signs for the flow of life, based on this, establishing a mobile bakery station was one of our preferred options, and MSC rescue groups started cooking bread and hot food in three cooking centers.

## Helping people trapped in snow and floods

In 2022, following heavy rains in Chahar Mahal and Bakhtiari province and Kohrang region, the water resources that had been dealing with the risk of drying up for a long time, improved, but a large number of people were surrounded by snow. Based on our commitment to the society, both at the national and local levels, with the participation and coordination of the crisis headquarters of Isfahan province, we were able to improve the conditions of the people trapped in snow and flooding in Kohrang and other areas in Isfahan province.

MSC measures in this regard are:

- Preparation and distribution of more than 1,100 livelihood packages including rice, oil and canned goods for the people surrounded in the snow of Kohrang region.
- Sending several tankers to transport surface water
- Sending a heavy trucks to Chadegan
- Sending a bulldozer and heavy trucks to Fereydounshahr
- Sending two heavy trucks to carry the bulldozer to Boein Miandasht
- Sending two graders andheavy trucks to Semirom
- Sending a large 10,000 liter industrial suction device to collect water on the roads of Isfahan province

# Improving community safety and health performance

As a responsible company, one of the areas we focus on at MSC is planning and implementing programs to improve the safety and health performance of society. For this purpose, some of the following measures have been taken:

- Holding training courses for employees about occupational safety and health, safety in the workplace and the principles of working with dangerous substances.
- Implementation of preventive programs and periodic repairs for equipment and machines, in order to maintain the health and safety of employees.
- Creating effective communication mechanisms between employees and officials, to interview employees and report the health and safety situation at the workplace.
- Detailed study and analysis of safety incidents and planning to prevent them from happening in the future.
- Accurate and continuous control for all manufactured products, in order to ensure their quality and health for consumers.

By doing these measures, MSC as a responsible company helps to improve the safety and health level of the society and shows that it will adhere to the same process in the future.

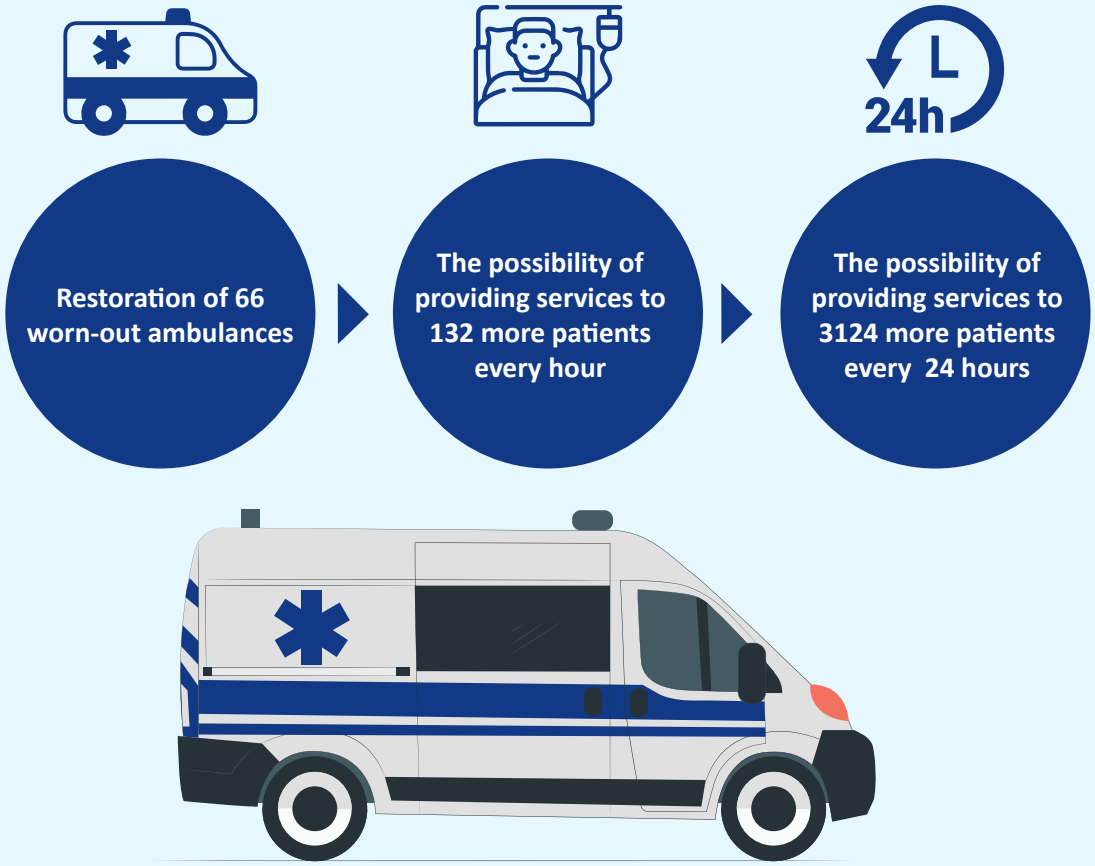
# Providing public services

Among other areas of focus of MSC, in order to support local communities, is providing services and participating in projects that are used by the community and have a public benefit aspect. It should be noted that the actions taken by MSC in this direction will greatly contribute to the development of the region's and province's infrastructure. Some of these measures include:

- Participation in Isfahan Metro Master Plan (Majlesi-Mobarakeh-Isfahan).
- Participation in the construction of the Western bypass freeway by freeing 14,830 square meters of land owned by the company.
- Participation in the construction of intersection of Vahdat in Kahnuyeh.
- Participation in the completion of Great Mosque of Isfahan with the financial assistance of more than 70 billion rials.
- Construction of Zarinshahr railway station.
- Supporting Mobarake steel Sepahan cultural and sports club and developing public sports in the province.
- Completion of Naqsh-e Jahan Grand Stadium.
- Effective financial support of the crisis headquarters of the province.
- Investment on the dam of the third water transfer tunnel.
- Financial support to the provincial working group for adapting to drought.
- Participation in providing stable security in the region.
- Financing the restoration of more than 60 medical emergency ambulances in the province that were out of service.

## Restoration of 66 worn-out ambulances

On average, each ambulance arrives at the destination about 9 to 14 minutes after the request. Therefore, on average, each ambulance will be able to transport two patients per hour. The restoration of 66 worn-out ambulances with a budget of 100 billion Rials of MSC made it possible for 132 patients to benefit from ambulance services every hour on average without wasting time or waiting.




### Supporting championship sports

Foulad Mobarakeh Sepahan Cultural Sports Club is under the support and ownership of MSC. The activities of the sports teams affiliated to Foulad Mobarakeh Sepahan Sports Cultural Club have influenced the public's image of MSC and had a great impact on expanding the company's reputation. Social vitality and well-being in the society are other effects of the company's activities in the field of sports. The sports teams supported by the company are:

### National and provincial championship teams in men's category

a)National championship including: football, handball, cycling and water polo in all age groups.

b)Provincial championship including: football, volleyball, futsal, climbing, basketball, wrestling, table tennis, chess, swimming, karate, judo, taekwondo, running, weightlifting, tennis, water polo and handball.

### Provincial championship teams in women's category

Table tennis, volleyball, swimming, handball, badminton and running.

### The honors of Sepahan football team

- 5 championships in the Premier Football League of Iran
- 4 championships in the Iranian Football Hazfi Cup (Knockout Cup Competition)
- 1 runner-up in the Asian Champions League
- Participation in the Club World Cup

Some of the successes and sports programs of the company include: achieving a record of %90 sports penetration rate, establishing a sports health clinic in Sepahan club cam (Bagh-Ferdos), establishing a specialized swimming academy for the children of MSC employees with the attendance of 600 people, a plan to monitor the health level and file a case. Health level monitoring program and health record for more than 1100 people, holding a sports miracle conference for more than 2000 employees, participation of the swimming team in the world labor competition in Finland and winning 19 medals, participation of the athletics team in the world company competition in Russia and winning 7 medals. Futsal team,

volleyball, men's and women's swimming, athletics, men's and women's table tennis runner-up, men's and women's futsal team winning third place, women's physical fitness team, basketball team in the Imidro tournament, football, wrestling, karate team championship in the provincial labor competition, the third place of the judo team in the provincial competition, the third place of the karate team in the national competition.


Foulad Mobarakeh women's swimming team championship in IMIDRO competitions -2022

Foulad Mobarakeh Sepahan men's football team-2022

Foulad Mobarakeh Sepahan women's football team-2022

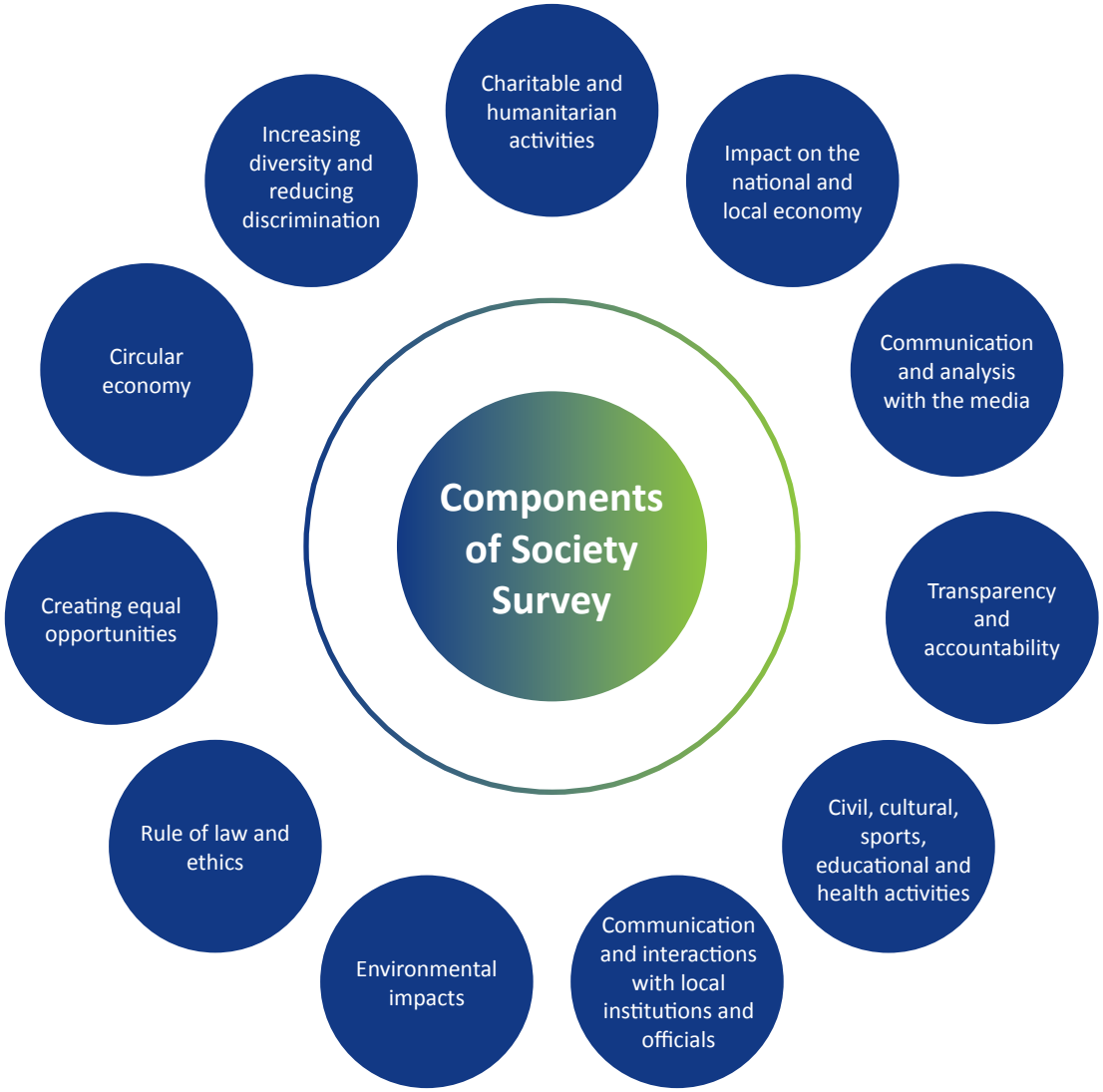
## Naqsh-e Jahan Stadium

Naqsh-e Jahan Stadium with a capacity of 75,000 spectators in the city of Isfahan, Iran, is a multi-purpose stadium that hosts the home games of the Mobarakeh Sepahan Football Team. This stadium, which is considered the second largest stadium in Iran, was completed and officially opened on November 12, 2016, with the efforts of MSC Company and with a cost of 300 billion Rials. This stadium has new parts such as sports and training halls, entertainment centers and modern restaurants.

# Society survey

Stakeholders are an integral part of our business, and knowing their views and opinions, especially the community, is of particular importance to MSC. The feedbacks we receive from the communities are directly reflected in the adoption of approaches as well as the development of our interactions with them. Using the experiences of the opinion survey center of Isfahan University of Technology, we have created a systematic approach to surveying the society and have improved it over the years. Since 2017, a survey questionnaire has been designed for two groups of citizens and officials and is distributed among these groups every year. To ensure the correctness of the data, performance indicators are extracted from valid databases. For this reason, the obtained data are reliable and accurate.

| The society survey | |
|---|---|
| Citizens | Officials |
| • Isfahan citizens<br>• Urban and rural residents of the region (cities such as Lenjan, Varnamkhast, Majlesi, Fooladshahr, etc.) | • Government and public agencies (such as provincial government, townhouse, industry, mine & trade organization, etc.<br>• City councils and municipalities<br>• Tax Affairs Organization<br>• Environmental protection and natural resources organizations<br>• Charitable and public foundations<br>• Universities, educational and research institutions, and Islamic seminaries |




Components of society survey

# Path of employee growth and development

“We stand by the employees for their growth and development and to create a safe, healthy and cheerful work environment”

# A great workplace

It is our belief that the creation of the future is done by humans alone. The valuable capital of the company is our employees at MSC, and we have opened a special account for them in order to lead the way towards a better future and sustainable development. Our competitiveness in terms of production is due to the continuous efforts by our employees towards organizational objectives and therefore MSC has embarked on developing and empowering its workforce with different effective methods, which will enable them to achieve their growth and development. In addition, the importance of the safety and health of the employees is one of the priorities of the company along with trying to satisfy them in this direction, therefore, relying on its organizational culture, it tries to provide safe and healthy conditions at the workplace and implement welfare programs and provide benefits, in addition to lifestyle and strong working relationships, create a great environment to work. Currently, 12,092 people are working in 2,794 organizational positions in MSC, and the organizational positions are divided into 251 jobs and 11 job categories.

**The number of employees**
**12092**

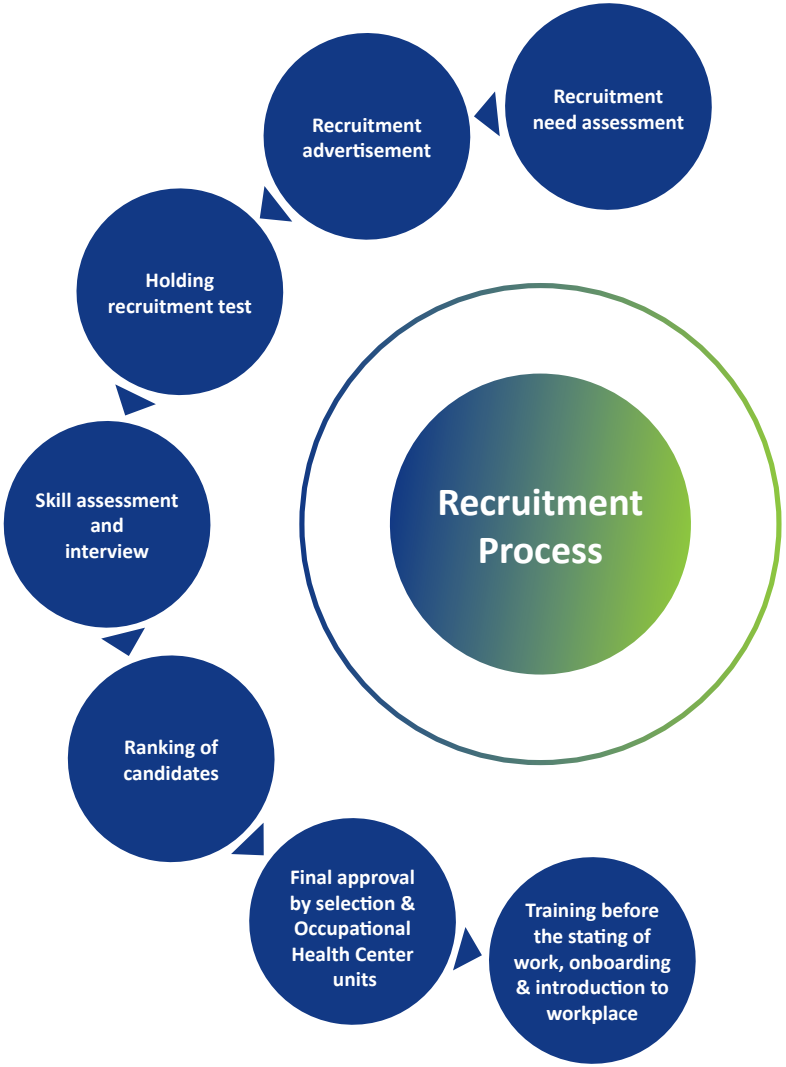
**Female employees 1.7%**

**Male employees 98.3%**

# Recruitment process

Recruiting human resources in MSC is a precise and transparent process, because production relies on skilled people who carry out appropriate tasks rather than a process based on resources and equipment. In addition, pursuing a sustainable approach for MSC, which measures its performance with international standards, is not possible without the existence of productive, healthy and knowledge-oriented human resources, which we refer to as human capital.

The estimation of required human capital in MSC is done according to the organizational structure, job competency profile, retirement rate and outsourcing policies and their provision is made. The final accepted people will enter the company based on vacant positions, the retirement date of the company's employees and the needs of the requesting units, and a work contract will be issued to them. After completing the pre-employment training course and completing the process of socialization and familiarization with the company, the accepted ones will be introduced to their workplace and the relevant decision will be issued to them for the destination post. Although this is the usual process of recruiting and hiring in MSC, but since it is important to take a step in the path of sustainability of continuous learning, the effectiveness and efficiency of this approach is continuously monitored by relevant indicators and based on organizational learning the approaches are reviewed and modified. For example, improving the process of occupational medicine by using the most up-to-date scientific models for recruiting human resources, as well as carrying out "socialization" projects, "allocation of people based on competence and personality traits", "skill evaluation of candidates at the diploma level", "competency evaluation of volunteers in the bachelor's degree program", "Mechanization of recruitment needs assessment process" and "Comprehensive human resource planning system design" are among the actions that are the result of these learnings and revisions and have been carried out in the company in the last two years.

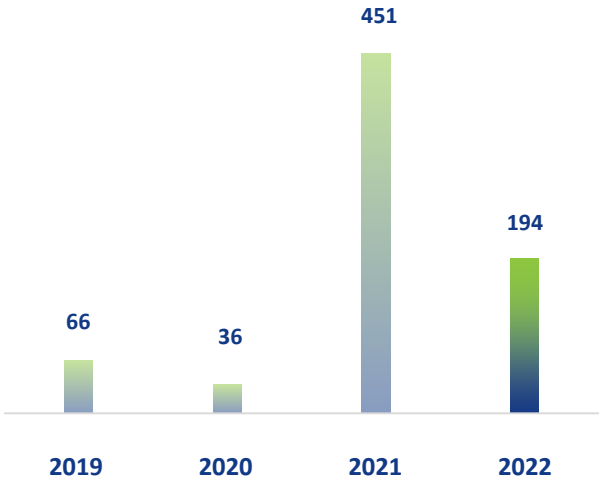


## Pre-employment training

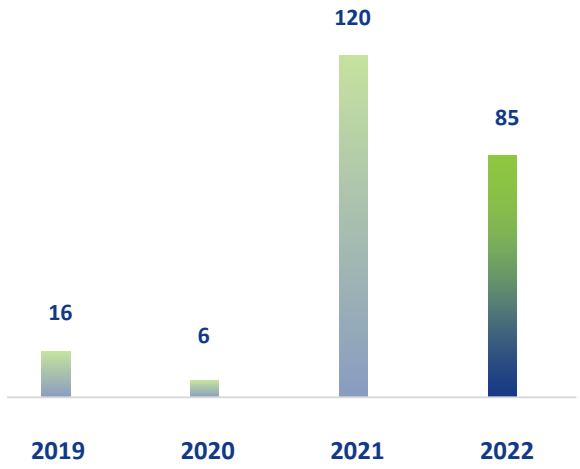
The pre-employment training can make a significant contribution to boosting people's confidence, improving the employment situation and reducing errors. For this reason, the MSC has for a long time established one criterion in order to determine and attract human capitals that have an education background or training of basic skills at standard centres. In this regard, in 2022, a tripartite agreement was concluded between MSC, Technical and Vocational Training Organization (TVTO) and the Instructor Training Center (ITC), according to which the technical and professional license of level "A" was granted to MSC by the head of the country's technical and professional organization.

## Anti-discrimination and equal opportunities

Creating job for local communities and increasing their development has been one of the major objectives of setting up a factory in this area. Therefore, we've always been trying to ensure equality of employment opportunities for job seekers both nationally and locally. Also "non discrimination against human resources" is one of the sections of our comprehensive code of conduct. At the beginning of their employment, employees at MSC shall be taught to follow a code of conduct. In addition, children will not be hired to work for a firm under the conditions of employment and our commitments in this field. In addition, we evaluate our suppliers against determined (social) criteria to ensure that no child or forced labor is used.




Number of new employees hired




The number of employees hired from the surrounding areas of the factory

# Developing employees' competencies with the succession planning approach

Succession system in MSC was designed and implemented in order to develop employees' competencies and occupy the target positions, because it will not be possible to move in the direction of sustainability without the presence of competent people who are able to take advantage of the experiences of previous employees and improve their performance. In order to ensure equal opportunities, MSC carries out an employee screening exercise to select a suitable candidate to replace the current position, on the basis of the degree of similarity between the qualifications of the current position and the target position. For the purpose of developing competence and identifying a final successor to this target, candidates participate in an assessment and development process. This system is defined and implemented for the two target groups of managerial jobs and shift supervisors based on the relevant competency model.

Designing and implementing online evaluation centers and holding tests online without the physical presence of assessors and assessees and even the possibility of employees working remotely as a result of the company's flexibility in special conditions are some of the measures that have been taken in MSC and the company has acquired capabilities in this field which have been used in line with better and more agile performance.

## MSC Company's approaches in the fields of recruitment, career development, job rotating and succession planning

| subjects | Related approaches | Implementation examples | Improvements | Efficiency and effectiveness evaluation indicator |
|---|---|---|---|---|
| Recruiting and employing human capital | - Assessment of needs and supply of human capital<br>- Employing people with medical restrictions<br>- Assessing of the mental ability of job applicants in the assessment center<br>- Conducting skills tests at operator level based on learning from professional technical standards in recruitment<br>- Holding an assessment center for bachelor's degrees in employment | - Finding job for employees who are sent to Employees Afairs unit<br>- Determining the retirement date of people based on records and added year of work | -Enhancing the agility of the recruitment<br>-Two-way communication between Human Capital and Organization Committee and company management and staff. | - Satisfaction with the timely supply of the required human capital |
| Career path | - Competency assessment for promotion of job class<br>- Promotion of job class and job groups | - A comprehensive system of professional competency profiles modeled on O*net website, Tata Steel Ltd., and Saipa Co.<br>- Development of professional regulations, including career path for production operator jobs<br>- Development of a professional career system for maintenance jobs<br>- Designing a comprehensive business competency management system based on the ISO 10015 standard at three levels: individual, team and group, and organization. | - Providing a suitable platform to evaluate electrical and mechanical repairmen and production operators within the company and by the assessment center team<br>- Cultivating skill assessors within the company<br>- Online training of assessors<br>-Competency classification in four KSAA knowledge categories based on manager, skill, attitude and ability | - Satisfaction with the opportunity to develop and promote based on the career path |
| Succession planning and development of leaders | - Implementation of the assessment center for managerial and supervisor categories since 2012 and the category of shift supervisors since 2014<br>- Development of leadership ranks based on the developed local model of leaders development<br>- Compilation of the Individual Development Program (IDP) for leaders | - People assessed in the competence assessment center:<br>• 340 assessments in the management category<br>• 263 assessments in shift foreman category<br>• 126 assessments in the undergraduate category<br>- Individual feedback reports compiled in the assessment center (464 reports)<br>- Individual Development Program (IDP) compiled and implemented (140 IDPs) | - Training of internal competence assessors from talented personnel within the organization and people interested in this field from universities and scientific centers within the province since 2015<br>- Forming a team of analysts to prepare analytical reports of individual and management feedback since 2016<br>- Modifying the assessment model of managers, chiefs and supervisors by learning from the past since 2017<br>- Holding an online assessment center in pandemic conditions<br>- Establishing a competence development academy (first phase, especially for shift supervisors) | - Proportion of managers and succession target groups with Individual Development Plan (IDP)<br>- The proportion of appointments in jobs with a supervisory nature based on the succession planning system<br>-Trust in the leadership team<br>- Satisfaction with the supervisor |

# Training and development of employees

MSC places great importance on enhancing competencies and improving employee performance as part of its sustainability efforts. To achieve this, the company has adopted the ISO 10015 standard to bolster the necessary skills and enhance employee effectiveness. For this purpose, the training needs of employees at the three levels of individual, group/ team, and organization are identified through the results of competency evaluation, performance evaluation, surveys, competency profile (educational standard) and are prioritized by specialized training, monitoring, design, and work groups. Furthermore, approximately 79% of training courses are carried out by internal instructors in order to effectively use their expertise and experience.

In addition, in order to improve this system, the projects "Compilation of educational profiles of the company's supervisory levels", "Needs assessment based on functional issues of units and employees", "Automating educational needs assessment based on the educational profile of employees", "Reviewing and monitoring needs assessments and identifying competency gaps through accreditation process", "Project connecting courses to competence", "Creating an application for communication with trainers and learners", "Development of virtual training", "Family Development Program (FDP)", "Deployment of organizational industrial psychologist in headquarters and operational areas", " Planning the implementation of training courses automatically" and "creating a system platform to evaluate the effectiveness of the courses at the level of the three mentioned models" are defined.

In order to ensure effective training and development of employees at the MSC, the following measures have also been adopted:

- Compilation of the Individual Development Plan (IDP) for the target groups of succession and the allocation of individual development coaches
- Revision of educational standards of posts and connecting it to educational courses
- mplementation and execution of the educational system to facilitate and improve the provision of educational services to employees and trainers
- Implementation and execution of the educational system to facilitate and improve the provision of educational services to employees and trainers
- Implementing a mentoring project with a problem-solving approach in the production areas as a pilot
- Automating the process of planning and defining training courses
- Identification, selection and allocation of performance improvement coach to units
- Implementation of ISO 10015 standard
- Equipping and implementing skills assessment and development workshops
- Designing and establishing a comprehensive system of sending employees to conferences and seminars
- The project to improve the needs assessment and training planning process
- Creating a comprehensive family development plan (FDP)
- Creating a system platform to provide feedback and improve training processes in IS-Suite
- Evaluating the effectiveness of two educational programs with the approach of calculating the return on investment
- Designing and holding the educational plan of the Discussion Cafe and Solutions
- Onboarding and providing pre-employment training for newly hired employees of MSC and Mobarakeh Steel group companies
- Developing a coaching system in company
- Reconstruction and development and updating of educational spaces
- Designing and preparing educational multimedia contents
- Development of a digital book reading culture at the company level

## Training

In line with comprehensive training and development of employees, training needs assessment is done in three levels according to ISO 10015 standard.

**Levels of training needs assessment**

**Organization level**

Based on the competencies required by the organization, training needs are identified and extracted through communication with the managers of the main processes of the organization.

**Group/team level**

Based on the competency profile of the group/team, the competency gap is identified and extracted for the people who are added to it.

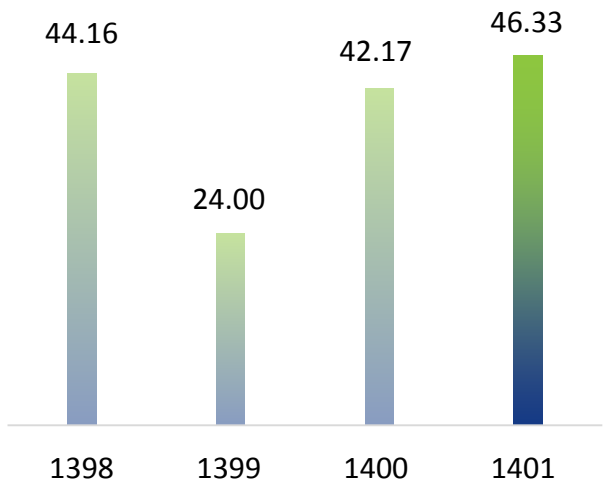
**Individual level**

Based on the training profile of the posts, competency gaps are identified and extracted.

## Planning and performing of training courses

Training courses and content are developed in the MSC, based on an analysis of training needs. As mentioned, 79% of these training courses are presented by internal instructors, and other courses are presented by external training institutions by selecting professors based on relevant instructions and after evaluation. The equipment and training facilities shall also be made available after the appointment of a trainer, in accordance with the course plan. Furthermore, in order to improve staff satisfaction with the quality of training services, the following measures have been taken:

- Formation of specialized training working groups
- Revision of the needs assessment and training planning process
- Monitoring the level of learners in training courses through the verification process
- Electronicization of training booklets and sending them to trainees before the start of the course
- Improving the mechanized training management system




Employee training per capita (person-hours)

## Employee performance management

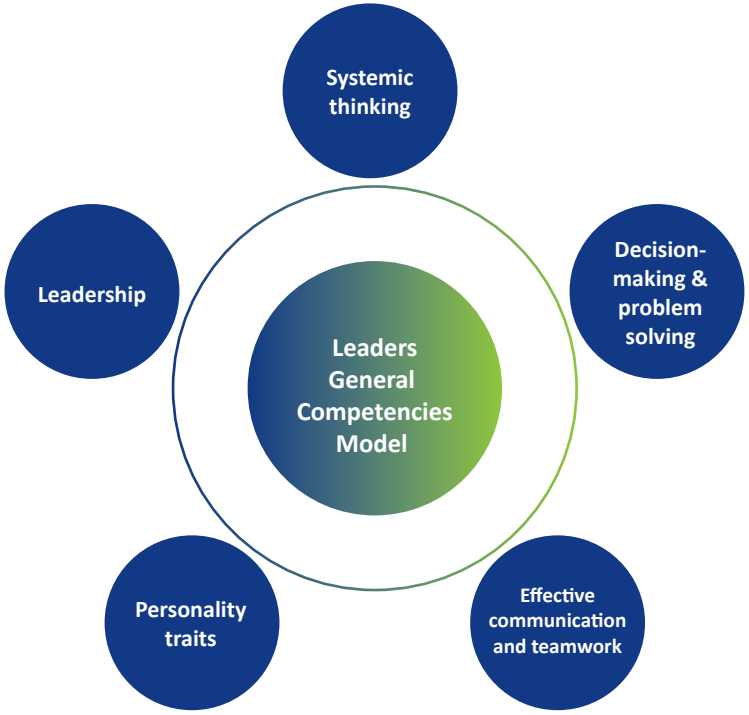
In our company, the employee performance evaluation system shall be based on two elements of "performance results and expectations" and "behavioral expectations," where employees are assessed in six months' time by using performance and behavioural indicators. At the end of the performance period, employees shall be assessed and evaluated by the direct supervisor and the results of the assessment shall be communicated to them by means of a performance report in the company's information system and a special employee portal. Services development and compensation procedures such as determining the length of a contract or payment are based on evaluation results. This system is in harmony with other human resource approaches (such as promotion, training and selection of employees) and its effectiveness is evaluated with a survey among employees. Over the past few years, behavioral expectations on employee performance have been revised and a simplified management system for dealing with employees' performance has been developed. In addition, this system has drawn up and implemented a model of performance evaluation for managers and leaders.

## Development of leaders

Walking the path of sustainability requires people who look at the challenges and opportunities of the road ahead with a long-term and macro perspective and guide others towards their goals by using their experiences and learnings. In MSC, the Leaders Development Plan (LDP) has been designed and established in three parts of the individual development program, the development of collective attitude and the development of business management knowledge with the aim of "improving the effectiveness of organizational leadership". The effectiveness of this system is evaluated through a survey of employees (indicator of satisfaction with the supervisor and trust in the leadership team). The improvements in this approach include the development of coaching skills at management levels, the preparation of a management tutorial in the individual development program, the development and implementation of the digital development leaders development plan for management and development of the individual development program (IDP) using the three sources of assessment center results, the evaluation of the organizational atmosphere by the subcategory and the evaluation of performance by the direct officer. In addition, creating a future literacy laboratory, creating a competence development academy, creating an evaluation system and developing personality and cognitive characteristics, and developing critical reasoning and thinking skills with the semi-theatre method are some of the future plans in this field.

### Competency model of leaders

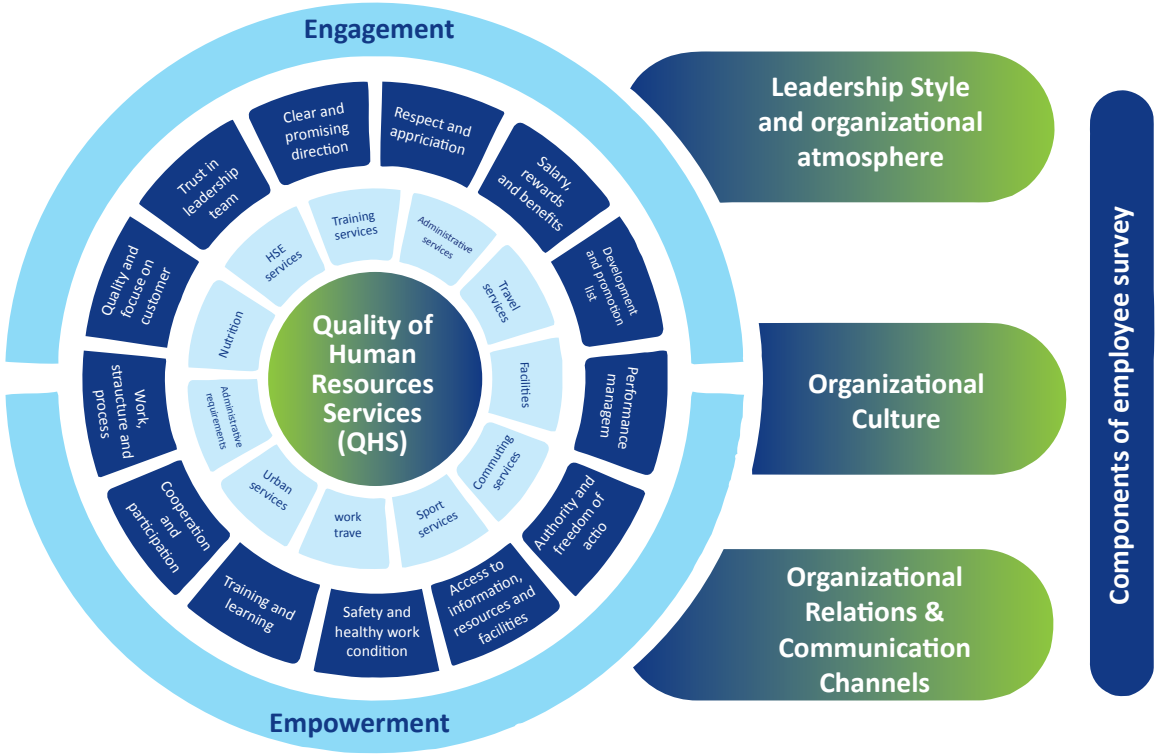
MSC has taken an approach that evaluates and develops the competencies of its management, with a view to succession and development of leaders. The "Managers Assessment Centre" is a place to assess current and potential managers of the company so as to ensure that there are adequate competencies and skills needed by management. Development plans needed by the leadership of the organisation shall be drawn up and carried out, in line with the areas for improvement set out in this assessment.




Leaders General Competencies Model

# Employees survey

In order to achieve a sustainable business, it is necessary to be aware of the opinions, concerns and expectations of all our stakeholders so that we can respond to them in the best way. In this context, the importance of employees is particular and we have considered a range of approaches for getting to know their views and concerns. Since 2005, a survey system of employees has been designed and implemented in MSC to monitor job satisfaction and engagement and to understand the needs and expectations of employees. This system has been improved due to organizational learning and benchmarking authentic models. Currently, a survey of employee satisfaction and job engagement by bechmarking the Hay Group model and a survey of satisfaction with the quality of human resources services (QHS) by learning from the service quality model (SERVQUAL) as well as other surveys such as assessing organizational culture and organizational communication in six-month, annually periods or in case of need in cooperation with academic and research centers. The results of these surveys are used in reviewing and formulating strategic goals and human capital plans and providing optimal services to employees. A number of actions have been implemented over the last few years to improve this system, e.g. mechanisation of survey procedures for increasing accuracy, precision and speed; implementation of a project aimed at measuring employee experiences through qualitative approaches like interviews or identification of appropriate improvement measures.




Different surveys in human capitals area

| Subject of survey | Application time |
|---|---|
| Employee job satisfaction and engagement | Since 2014 until now |
| Satisfaction with the quality of human capitals services (QHS) – perspective of employees | Since 2014 until now |
| Satisfaction with the quality of human capitals services (QHS) – perspective of unit officials | Since 2015 until now |
| Investigation of organizational culture | Since 2009 until now |
| Effectiveness of organizational communications and communication channels | Since 2015 until now |
| Employees and contractors' statement of health during COVID-19 pandemic | Since the beginning of 2020 |
| Mental health screening of MSC employees | Since the beginning of 2020 |
| Assessing the quality of life of employees | Since 2021 |
| Identifying the values, attitudes and expectations of the employees of MSC with an emphasis on generation gap | Since 2021 |

## Improvement of employee satisfaction

MSC, considering the engagement of employees as one of the important components of employee satisfaction, seeks to increase the satisfaction and engagement of employees through the effective management of this engagement and also by using approaches such as paying appropriate salaries, giving financial and non-financial rewards, designing incentive packages, providing benefits and amenities in accordance with the system of service compensation and appreciation of employees, training and development and implementation of occupational health and safety management systems and improving employee health management.

## Improving the quality of services provided to human capital

Increasing employee satisfaction and improving the quality of services provided to human capital is important for MSC, therefore, a set of welfare facilities, including the provision of recreational and cultural services, improving the facilities and number of sports fields, improving commuting services, loans and financial facilities, mechanization of administrative processes, etc. are designed according to the needs and expectations of employees.

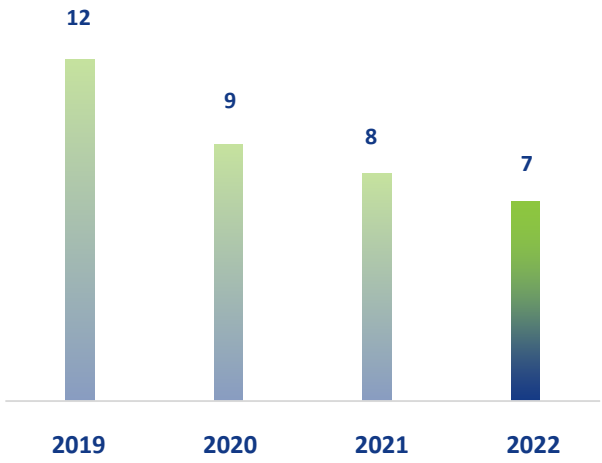
## Retirees, Sustainability path guides

As a result of their efforts to improve the organisation during their years of service, the retirees are very valuable to MSC, and they're guiding the current and future generations of the organisation towards sustainability. Also, retirees are valuable sources of knowledge and experience, and it is necessary to transfer this knowledge and experience to the next generation of the organization.

In order to honor retirees and appreciate their services, MSC implements various programs, some of which include holding a retirement party and giving gifts, financial assistance and payment of employees' children marriage loans, the possibility of using medical, welfare and sports facilities (similar to employees) etc. In addition, when the organisation's qualified and experienced retired persons are chosen to take up teaching or consultancy positions within the organization, they will make available their valuable knowledge and experience to its employees. Moreover, the retirees use this method of coaching to transfer knowledge and experience to their replacements and new hires. Another approach that is used in this field is to use the experiences of retirees in transferring technical knowledge to MSC Group companies (as lecturers or consultants-coaches).

# Retention, absenteeism and employee complaints

In order to reduce the proportion of absenteeism and employee retention, MSC has implemented a wide various approaches such as granting facilities and welfare and recreational services, job classification system, and other occupational benefits, performance management system, etc. In addition, the number of complaints is very small compared to the number of employees of the company.

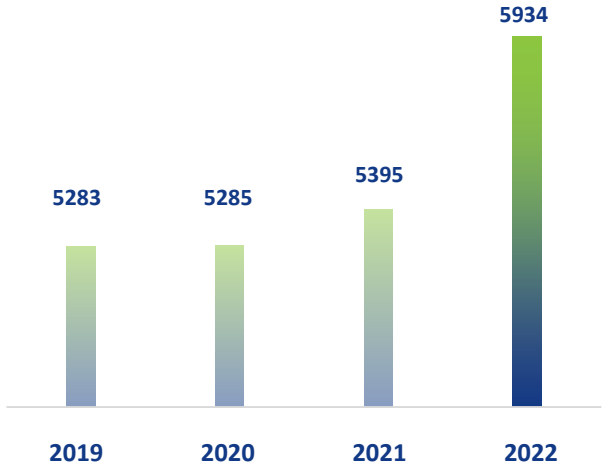



The number of employee complaints from the company

## Employees, sustainability ambassadors

In MSC's interpretation, employees are ambassadors of the company's sustainability ambassadors who can represent the company's reputation and successes. To this end, the company has numerous platforms such as tpublication of articles and books written by employees, presentation of articles and achievements in conferences and seminars, training of organizational excellence evaluators, encouraging the presence of auditors in the Iranian National Excellence Award and IMIDRO Productivity Award, holding organizational excellence tours, and providing other companies with the opportunity of visiting and modeling the success and experiences of MSC, etc. Also, in the "Organizational Brand Management" project, the role of employees in promoting the company's external image has been explained.

When employees participate in society events and activities, they are also regarded as ambassadors of the company's sustainability. To that end, employees are invited and encouraged to support and participate in social activity by establishing suitable conditions of employment, providing optimal information and implementing a variety of approaches.In fact, the participation of employees in humanitarian activities, such as helping the victims of accidents, the needy and the disabled, homeless people and prisoners of non-intentional crimes, shows the social maturity and high responsibility of the company's employees.




The number of participants in humanitarian activities

## Internal Communications System

"Improving communication and interactions with human capital" is a strategic goal for us, therefore MSC has created several vertical and horizontal communication channels and uses tools such as surveys, meetings of human capital managers with employees and receiving feedback to identify the communication needs of employees. At present, in order to establish effective internal communication between employees and the management team, as well as employees with each other, approaches such as meetings of the CEO, deputies and managers with employees, meetings of managers with supervisory layers, meetings of heads of production and maintenance, transformation committees are used.

In order to improve its internal relations, the company organises internal conferences, establishes a website and an employee portal, social media, Steel's newsletter, short message system (SMS), comprehensive survey of employees as well as “My steel” internal messenger. In order to evaluate the performance of communication approaches, MSC uses the annual survey "Effectiveness of organizational communication and communication channels". The measurement of employees' satisfaction with organizational and company communication channels was also incorporated in the "Discussion and Solutions Cafe" project. At the same time, a new project titled "MSC communication management in the field of employees" has been defined to improve this system.

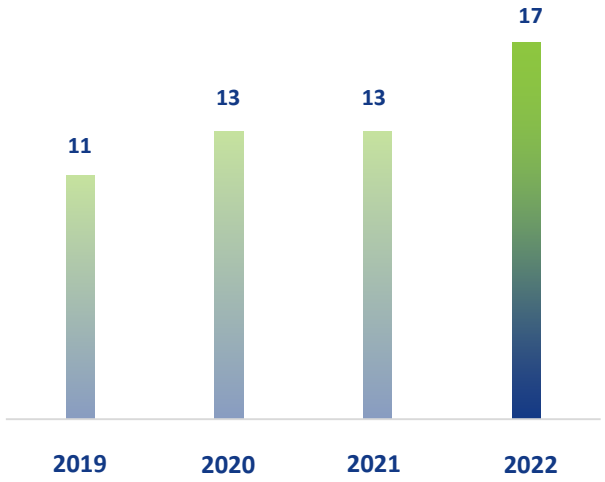
**Employee communication channels**

| Communication channel | Issues | Communication orientation of | | | The application scope of the approach |
|---|---|---|---|---|---|
| | | up | down | Horizontal | |
| Radio Foolad | Reporting on the company's programs in various fields of production and services (reports, interviews, etc.) | ✓ | ✓ | ✓ | All employees |
| Company website | Informing the company's activities in different fields | ✓ | | | Community, employees |
| Employee portal | Reporting on the rules and regulations of the company, services that can be provided to employees, etc. | ✓ | ✓ | | All employees |
| Electronic organization, organizational e-mail, CEO email, Telegram channel | Office automation messages, notifications, correspondence, information on production, processes, and plans, etc. | ✓ | ✓ | ✓ | Most of the employees |
| Foolad Newsletter (Weekly), Iron and Steel Quarterly magazine | News and information related to the company and achievements | ✓ | ✓ | | All employees |
| Booklets, brochures and reports | Regulations, health and safety warnings and technical issues | ✓ | | | All employees |
| Bulletin boards | Circulars, administrative, welfare and sports notices | ✓ | | | All employees |
| Strategic maps, strategic goals boards, and SEM strategic management system | Annual strategies and goals, key performance indicators, and achievements | ✓ | ✓ | ✓ | All employees |
| Internal meetings, exhibitions and conferences | Presentation of achievements, goals and plans, training topics and improvement activities | ✓ | ✓ | ✓ | All employees |
| short message system (SMS) | Production and quality information, training programs and information, employee welfare programs, invitations to participate in meetings etc. | ✓ | ✓ | ✓ | All employees |
| Comprehensive survey system | Awareness of employee satisfaction level and perception of basic human resources issues | | ✓ | | All employees |
| Virtual groups and exchange of opinions in social media | Informing the latest guidelines, regulations and events of the company and asking for opinions on these matters | ✓ | ✓ | ✓ | All employees |
| Incident notification system | Awareness of officials, employees and contractors about the events that happened in the company | ✓ | | | All employees |
| My steel application | Informing and exchanging opinions about the company's important issues | ✓ | ✓ | ✓ | All employees |

| Employee communication channels | | | | |
|---|---|---|---|---|
| Communication channels | level | content | examples | Time Interval |
| Meetings between managers and employees (except for pandemic conditions) | All employees | Informing about the performance and future plans of the company<br>Investigation of issues and problems of employees and current affairs | General meeting of the CEO with the employees<br>CEO and vice presidents visit the units<br>Face-to-face meeting between managers and employees<br>Meetings of the Human capital and Organizaation Deputy with the company's managers and staff | six months<br>yearly<br>weekly<br>seasonal |
| Joint meetings of managers with the management layers of the company | Management, supervision and expert levels | Informing the company's issues and plans | Management committee meetings<br>Meetings of the Council of Deputies<br>Meetings of human resources officials with exploitation<br>CEO meetings with heads and supervisors | monthly<br>every two weeks<br>weekly<br>yearly |
| Meetings of heads of production and maintenance | Operating units | Production and maintenance issues of shift<br>Area's issues and follow up on the realization of the production plan | Meetings of heads with officials<br>Production and repair meetings | Daily<br>Weekly |
| Transformation committees (except for pandemic conditions) online | Management, supervision and expert levels | Objectives, strategies, processes, improvement projects | High Transformation Committee<br>Main and departmental transformation committees | monthly<br>every two weeks |
| Safety meetings | Deputies and area managers,<br>HSE officials,<br>heads of units,<br>Shift supervisors and contractors | Examining issues and problems of safety, professional health of employees and contractors | Technical protection and work health committee of the company<br>Safety meetings and visits (VIP)<br>Meetings of technical protection and work health committee of districts, units and teams<br>Meetings of technical protection and work health committee of contractor companies<br>Three-minute shift meetings at the beginning of the shift<br>Incident review meetings (quasi-incidents and incidents) | monthly<br>monthly<br>monthly<br>monthly<br>beginning of each shift<br>case by case |

# Transferring strategies and goals to employees

Knowing the path will make it easier to follow. Without employees who know the strategies and objectives well, sustainability cannot be achieved. MSC uses various methods such as six-monthly conferences of senior management with employees, meetings of transformation committees, steel newsletters and specials, publication of strategy maps and goal boards, intra-unit meetings to inform about the goals of holding competitions and goals to effectively convey strategic directions, strategies and goals to employees, especially in the field of sustainability.



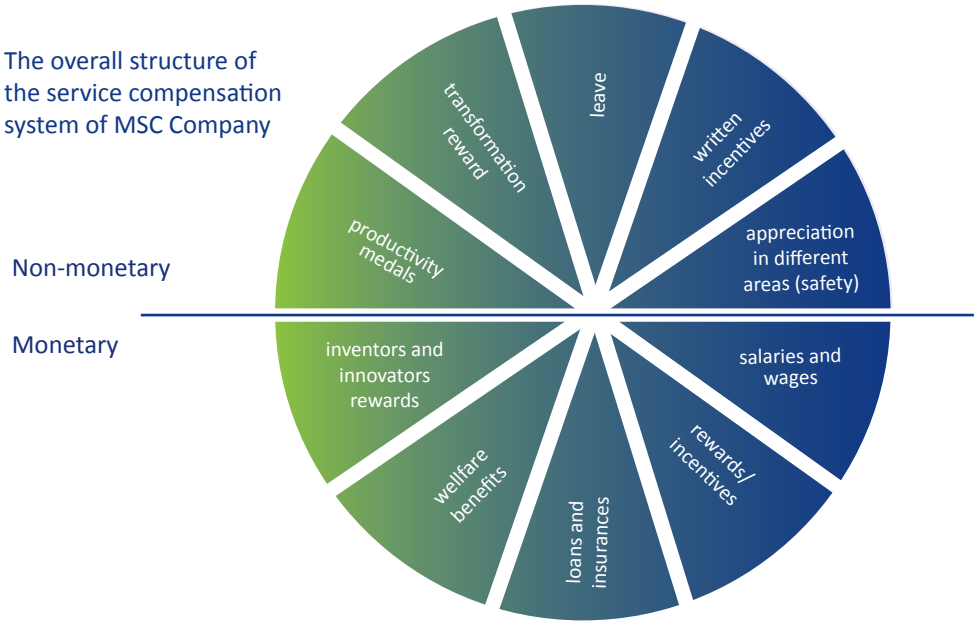

The number of employees who have received maternity leave

# Salary and benefits

**Thank you, fellow traveler**

In MSC, salaries and benefits are paid to the employees based on the job classification system and in line with the policies of the Human Capitals and Organization Committee, affected by the job (such as the salary of the job group), position (such as the difficulty of the work, the right of responsibility) and the employee (such as the salary of the years of work). Also, in order to increase the motivation of employees, several financial and non-financial approaches in the form of regulations and instructions such as efficiency bonuses, production, participation systems, improvement and safety performance committees, extraordinary inventors and innovators, productivity rates, appreciation of the implementation of projects, experiences and superior suggestions have been created. In addition, there are many other benefits and facilities such as loans, travel and restaurant costs, appropriate payments, welfare, sports facilities, supplementary insurance, marriage leave, leave of death of relatives, maternity leave and breastfeeding for women, written encouragement etc. In order to improve the quality of life of employees and their families. These elements are a compensation package for employees in addition to salaries and benefits. These approaches are continuously evaluated based on organizational conditions and external developments, and the required improvements are identified and implemented. An example of new improvements identified in this field are two projects "Revisioning the payment system for improvement and transformation bonuses" and "connecting performance management to reward systems".

The overall structure of the service compensation system of MSC Company



## Energy+ event

In order to improve interactions, empathy and belonging among our employees as well as reduce the burnout of human resources, we organise various events in MSC. These events not only help individuals to develop their interactions with their colleagues beyond their job duties, It also provides the opportunity to spend quality leisure time with the family. The Energy+ event was a series of creative and uplifting games, designed in groups on the basis of gender, age and family characteristics and capabilities, which were organised from February, 23 to March, 2, 2022.


# Assessment and strengthening of organizational culture

Since organizational culture in MSC is of great importance in organizational development and strategy realization, the company has evaluated its organizational culture based on Denison's model in 2006 through various studies and determined its dominant cultural trends. After asessment of cultural situation of the organization, the necessary solutions to strengthen the culture and achieve a success-oriented cultural level are designed and implemented. Also, the organizational culture management model of MSC has been designed with the cooperation of university professors, the purpose of which is to customize the culture management model and subcultures of the organization according to the conditions of the company.

### Development of cooperation and teamwork culture

In order to promote the culture of team work and participation, MSC uses various solutions. These solutions include holding training courses, incentive systems, productivity records, holding an annual conference on productivity and appreciation of productive employees, various competitions (such as top suggestion, top experiences, etc.), publishing books, publications and specials issues, etc. The effectiveness of these approaches is evaluated through indicators of satisfaction with cooperation and participation, the percentage of employees' participation in transformational systems and suggestions per capita. In this area, improvements have been made such as the acceptance of bonuses for special projects and the award of non-monetary prizes to top projects and suggestions.

# Employees health and safety

The employees of MSC are our support on the path of sustainability. Therefore, their health is important in physical and mental aspects. Our effort in MSC is to maintain the organizational value of "safe, high-quality and timely work" and to act towards it. In addition, taking into account the legal requirements and the needs and expectations of the stakeholders, we seek to fulfill the strategic goal of "Improving the safety and health of employees". For this purpose, the occupational health and safety management system of MSC is designed and implemented based on risk management. This system includes various approaches, including the requirements of the occupational health and safety management standard (ISO 45001), compliance with the rules of technical protection and occupational health, the rules and regulations of the Ministry of Health, Treatment and Medical Education of I.R. Iran, and the establishment of a safe work management system (ISO 45005 standard).

**A healthy and safe journey on the path of sustainability**


Model of professional health and safety management system

In the occupational health and safety management system based on risk management, hazard identification and evaluation of safety and health risks play a key role in advancing organizational goals and protecting human capital. Monitoring and proper attention of companies to process safety, while preventing potential negative effects caused by process accidents, protects the organization's assets and human capital, as well as the continuation of high-quality and safe business, along with reducing costs caused by changes.

MSC is not an exception to this rule and needs to pay attention to process safety management with the prospect of achieving zero accident production. Based on this, the HSE management of MSC in order to reduce human, equipment and process accidents, while designing the occupational health and safety management model and successfully implementing the first five-year program (2016-2012) and the second five-year program to improve the company's occupational health and safety (2021-2017), has taken steps to develop the third five-year plan for the improvement of the company's occupational health and safety (2026-2022). Among the important measures taken in this field are the mechanization of the accident and near misses registration system as well as the company's risk identification system as the basis of occupational health and safety management based on risk management, safety performance evaluation at two levels (individual and unit), promotion occupational health and safety management standard from OHSAS18001 to ISO 45001 in the between 2018 and 2019 etc.

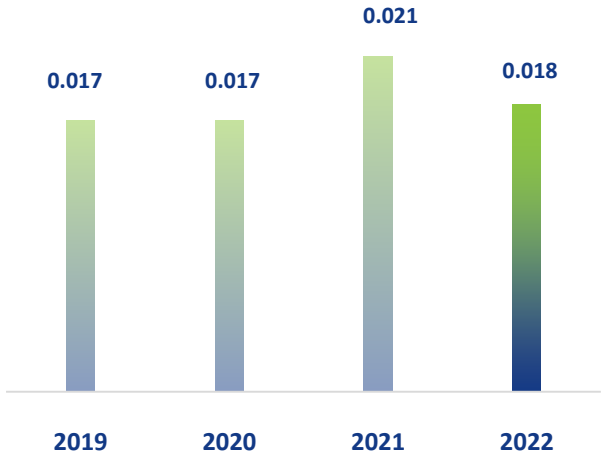
In recent years, in order to improve the occupational health and safety management system and process safety management, several projects such as "Identification of the risks of molten lifting cranes using the FTA method", "Evaluation of the infrastructure and safety life cycle stages of the safety instrument systems of the hot rolling preheat furnace unit (SIL Study), "Study of process hazards of Kharazi direct reduction unit and Oxygen unit with HAZOP STUDY Method", "Impact Modeling in MSC and Saba Complex Oxygen Units and new development plans", "Tripod-Beta Model Development for analyzing accidents based on human factors engineering indicator" and "Implementation of the study-training phase of process safety management establishment in MSC" have been defined and implemented.

Some of ongoing projects related to process safety are the hazard identification and operation management (HAZOP) study project in process units including energy and fluid distribution, electric arc furnaces, RH-Top workshop (secondary metallurgy of the steelmaking area), box annealing and galvanizing and colored sheet, hazard identification study project with HAZID method in energy and fluid distribution units and electric arc furnaces, impact modeling study project, LOPA and SIL Study in process units including energy and fluid distribution, box annealing and galvanizing and colored sheet, as well as quantitative risk assessment (QRA) in the energy and fluids distribution unit and Bow-Tie risk assessment in the electric arc furnace unit of MSC with the participation of Tarbiat Modares University Process Safety Center (CPSC).

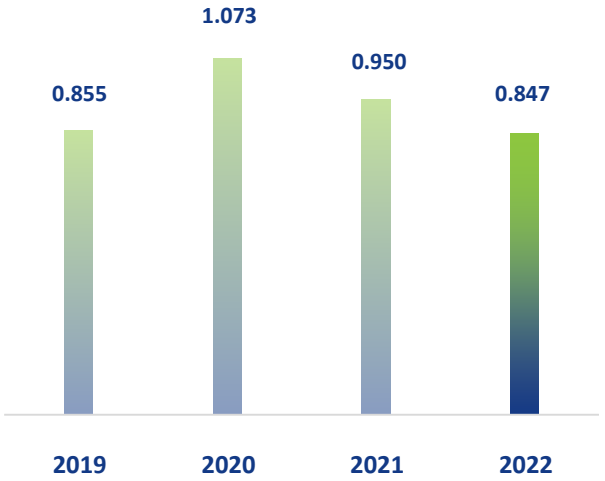
The effectiveness of the approaches used in these systems is evaluated through internal

and third-party audits, safety inspections, internal and external VIP visits, and measuring key indicators. The indicators of severity rate of accidents and frequency rate of accidents have improved due to the lessons learned from past events and the successful implementation of the first and second five-year comprehensive plan for the promotion of occupational safety and health (2012-2021). During these years, many measures such as organizing regular safety improvement meetings with the presence of managers, continuous inspections, training and culture building, implementing mechanized safety systems, evaluating units, employees and contractors, holding three-minute meetings at the beginning of each shift, preparing safety documents such as motion graphics and infographic of the hazards of different areas etc. has been performed.

Also, developing a workflow to encourage employees to participate in periodical examinations creates a growing and stable trend of employee participation indicator in this field. In addition, other programs such as conducting examinations outside the company for managers, chiefs and supervisors and holding a training course on health issues have been implemented for this group on the day of periodical examinations. According to the statistics presented in the reports of the Worldsteel Institute, MSC indicators of Frequency Rate of Accident (FR) (Lost Time Injury Frequency Rate or LTIFR), Severity Rate of Accident (SR) and the Ftality Frequency Rate (FFR) are less than other steel companies and are considered as benchmark which shows the importance of paying attention to occupational safety and health in this company.




Severity Rate (SR) of Incidents




Frequency Rate (FR) of Incidents

**Days without Incidents (days)**

| Until 2019 | Until 2020 | Until 2021 | Until 2022 |
|---|---|---|---|
| 635 | 775 | 1146 | 1511 |

**Fatality Frequency Rate (FFR)**

| 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|
| 0 | 0 | 0 | 0 |

**Number of near misses (Green Cards)**

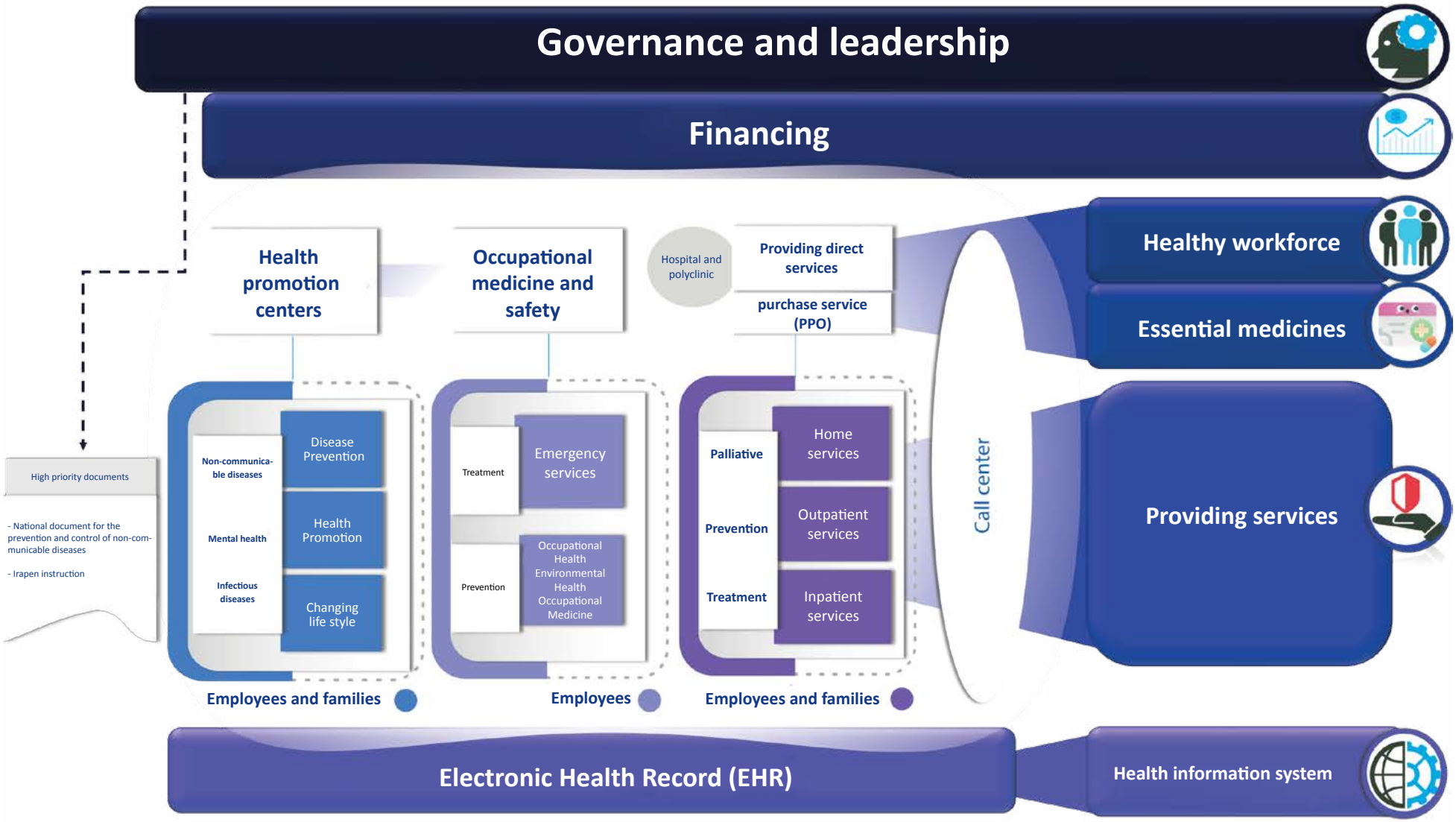
| 2019 | 2020 | 2021 | 2022 |
|---|---|---|---|
| 7337 | 10920 | 13963 | 17663 |

## Comprehensive employee health program

The comprehensive employee health program of MSC has been compiled based on strategic analysis and review of relevant elements and with the participation of related units such as HSE, public services (sports and nutrition), training and development of human capital, etc. This program is based on the four pillars of "occupational health", "general health", "work environment health" and "mental health" and after defining the relevant measures, it has been communicated to all units. According to the "Industrial Medicine Examinations" workflow, every year all of employees are subjected to medical tests and examinations, and by examining health risk factors, the index of "disease risk factors" is calculated and monitored. The comprehensive employee health program is evaluated through surveys and related performance indicators based on regular periods of time. Collaborative ergonomic intervention program with the aim of reducing musculoskeletal disorders, developing guidelines for prohibiting/reducing/combating smoking in the company, evaluating the ergonomics of office supplies before purchasing, and creating structured meetings with units to explain measures to improve the public health of employees, as well as establishing egonomics laboratory, research project investigating shift work systems and the problems caused by them in the company, implementation of the program of hearing protection and respiratory protection in the workplace, implementation of the pilot project for the labeling of hazardous chemicals (GHS), identification and evaluation of health risks using specialized methods and the electronic system for specialized referral of the results of industrial medicine examinations are the measures that have been taken in line with the improvement and promotion of the comprehensive employee health program. Also, the research projects "Designing a model of the electronic medical record system", "Comparison of HSE performance indicators before and after the outbreak of the Corona outbreak" and "Designing a comprehensive system for improving the health of employees" are being implemented with the cooperation of the universities in this field.

Designing a comprehensive health care and promotion system of MSC, focusing on the three areas of occupational medicine and occupational health, health promotion, and treatment, is considered one of the latest achievements in explaining the health promotion perspective in this company. The creation of the electronic health record as the foundation of this plan and the launch of the guidance center as the thread connecting the service delivery areas are in progress. Also, revising the calculation of the company's health index has been another step towards increasing the accuracy of measuring the impact of activities on health.

| Safety and health approaches aimed at promoting the safety and health of employees | |
|---|---|
| Improvement of workplace conditions | - Identifying, measuring, evaluating and controlling harmful factors in the work environment<br>- Performing occupational health and safety inspections<br>- Defining and implementing corrective projects to improve working environment conditions |
| Enhancement of personnel general health | - Planning and implementation of pre-employment and periodical examinations of employees<br>- Pursuing the job suitability of employees<br>- Training and culturalization of employees according to the principles of self-care |
| Promotion of ergonomic conditions | - Identifying and assessing the risk factors of the ergonomics of the work environment<br>- Collaborative ergonomics intervention program with the aim of eliminating or reducing skeletal and muscular disorders<br>- Ergonomic assessment of office supplies before purchase<br>- Evaluation of the ergonomics of transportation services |




The health system of MSC

# “It is an ineffaceable path”

# GRI standards

## GRI Standards

| GRI standards | Title | Pages and Notes |
|---|---|---|
| GRI 102: General Disclosures 2016 | | |
| Organizational profile | | |
| 102-1 | Name of the organization | 3 |
| 102-2 | Activities, brands, products, and services | 3، 7-6، 11-9، 57-53 |
| 102-3 | Location of headquarters | 3، 132 |
| 102-4 | Location of operations | 3، 7-6 |
| 102-5 | Ownership and legal form | 7-6، 26-25 |
| 102-6 | Markets served | 5، 53 |
| 102-7 | Scale of the organization | 3، 5، 7-6، 101 |
| 102-8 | Information on employees and other workers | 3، 5، 101 |
| 102-9 | Supply chain | 76-67 |
| 102-10 | Significant changes to the organization and its supply chain | 7-6 |
| 102-11 | Precautionary Principle or approach | 32-31، 119-117 |
| 102-12 | External initiatives | 14، 43، 92 |
| 102-13 | Membership of associations | 43، 92 |
| Strategy | | |
| 102-14 | Statement from senior decision-maker | 12 |
| 102-15 | Key impacts, risks, and opportunities | 32-31 |
| Ethics and integrity | | |
| 102-16 | Values, principles, standards, and norms of behavior | 4، 61 |
| 102-17 | Mechanisms for advice and concerns about ethics | 24-22، 98، 109، 114-112 |

| GRI standards | Title | Pages and Notes |
|---|---|---|
| **Governance** | | |
| 102-18 | Governance structure | 25-28 |
| 102-19 | Delegating authority | 25-28 |
| 102-20 | Executive-level responsibility for economic, environmental, and social topics | 25-28 |
| 102-21 | Consulting stakeholders on economic, environmental, and social topics | 22-24، 61، 72، 98، 109، 112-114 |
| 102-22 | Composition of the highest governance body and its committees | 25-28 |
| 102-23 | Chair of the highest governance body | 25-28 |
| 102-24 | Nominating and selecting the highest governance body | 25-28 |
| 102-25 | Conflicts of interest | 25-28 |
| 102-26 | Role of highest governance body in setting purpose, values, and strategy | 25-30 |
| 102-27 | Collective knowledge of highest governance body | Regarding the changes in the members of BOD based on the composition of shareholders, personal information of BOD members can be accessed through MSC's website (www.msc.ir) and Comprehensive Data Base Of All Listed Companies website (www.codal.ir) |
| 102-28 | Evaluating the highest governance body's performance | 25-28 |
| 102-29 | dentifying and managing economic, environmental, and social impacts | 17-22، 29-30 |
| 102-30 | Effectiveness of risk management processes | 31-32 |
| 102-31 | Review of economic, environmental, and social topics | 25-30 |
| 102-32 | Highest governance body's role in sustainability reporting | 20، 25-28 |
| 102-33 | Communicating critical concerns | 22-30، 31-32، 112-114 |
| 102-34 | Nature and total number of critical concerns | 20-21 |
| 102-35 | Remuneration policies | 115-116 |
| 102-36 | Process for determining remuneration | 115-116 |
| 102-37 | Stakeholders' involvement in remuneration | 109 |
| 102-38 | Annual total compensation ratio | Limitation on the provision of information due to the confidentiality of the subject and also it is not usual that this information is announced in the country and the markets in which we are present. |
| 102-39 | Percentage increase in annual total compensation ratio | |

| GRI standards | Title | Pages and Notes |
|---|---|---|
| **Stakeholder engagement** | | |
| 102-40 | List of stakeholder groups | 23-24 |
| 102-41 | Collective bargaining agreements | In this regard, MSC acts in accordance with the laws and regulations of the Islamic Republic of Iran including the constitution and labor law (labor code) of I. R. Iran. |
| 102-42 | Identifying and selecting stakeholders | 22-24 |
| 102-43 | Approach to stakeholder engagement | 22-24 |
| 102-44 | Key topics and concerns raised | 17-21 |
| **Reporting practice** | | |
| 102-45 | Entities included in the consolidated financial statements | 25-28 |
| 102-46 | Defining report content and topic Boundaries | 17-21 ،14 |
| 102-47 | List of material topics | 21 ،18-19 |
| 102-48 | Restatements of information | 14 (about this report) |
| 102-49 | Changes in reporting | 14 (about this report) |
| 102-50 | Reporting period | 14 (about this report) |
| 102-51 | Date of most recent report | 14 (about this report) |
| 102-52 | Reporting cycle | 14 (about this report) |
| 102-53 | Contact point for questions regarding the report | 3، 132 |
| 102-54 | Claims of reporting in accordance with GRI Standards | 14 (about this report) |
| 102-55 | GRI content index | 123 |
| 102-56 | External assurance | |
| GRI 103: Management Approach 2016 | | |
| 103-1 | Explanation of the material topic and its boundary | 17-21 |
| 103-2 | The management approach and its components | 25-30، 31-32، 37، 41، 43، 44-45، 47-48، 50-51، 59، 61-62، 65-66، 67-69، 72، 77، 79، 81، 84، 89، 102-103، 106، 108، 117-118، 120-121 |
| 103-3 | Evaluation of the management approach | 25-30، 31-32، 37، 41، 43، 44-45، 47-48، 50-51، 59، 61-62، 65-66، 67-69، 72، 77، 79، 81، 84، 89، 102-103، 106، 108، 117-118، 120-121 |

| GRI standards | Title | Pages and Notes |
|---|---|---|
| GRI 200: Economic | | |
| Economic Performance 2016 | | |
| 201-1 | Direct economic value generated and distributed | 5 |
| 201-2 | Financial implications and other risks and opportunities due to climate change | 31-32 |
| 201-3 | Defined benefit plan obligations and other retirement plans | 110 |
| 201-4 | Financial assistance received from government | None |
| Market Presence 2016 | | |
| 202-1 | Ratios of standard entry level wage by gender compared to local minimum wage | There is no significant difference. In this regard, MSC acts in accordance with the laws and regulations of the Islamic Republic of Iran including the constitution and labor law (labor code) of I. R. Iran. |
| 202-2 | Proportion of senior management hired from the local community | 102-103 |
| 2016 Indirect Economic Impacts | | |
| 203-1 | Infrastructure investments and services supported | 89-97 |
| 203-2 | Significant indirect economic impacts | 89-97 |
| 2016 Procurement Practices | | |
| 204-1 | Proportion of spending on local suppliers | 67-68 |
| 2016 Anti-corruption | | |
| 205-1 | Operations assessed for risks related to corruption | Corruption and related risks are of great importance to MSC and in this regard, necessary training are presented to employees through company Code of Conduct. Also, this issue is monitored and controlled through current approaches in MSC's related departments (e.g. security department). |
| 205-2 | Communication and training about anti-corruption policies and procedures | |
| 205-3 | Confirmed incidents of corruption and actions taken | None |
| Anti-corruption 2016 | | |
| 206-1 | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices | None |
| Tax 2019 | | |
| 207-1 | Approach to tax | 92, MSC pays its taxes according to laws and regulations of Iran, Ministry of Economic Affairs and Finance, Iranian National Tax Administration (INTA). Also, policies in this regard are made in the framework of and in accordance with these laws and gulations |
| 207-2 | Tax governance, control, and risk management | 31-32 |
| 207-3 | Stakeholder engagement and management of concerns related to tax | 31-32 |
| 207-4 | Country-by-country reporting | 31-32 |

| GRI standards | Title | Pages and Notes |
|---|---|---|
| GRI 300: Environmental | | |
| Materials 2016 | | |
| 301-1 | Materials used by weight or volume | 68 |
| 301-2 | Recycled input materials used | 68 |
| 301-3 | Reclaimed products and their packaging materials | None |
| Energy 2016 | | |
| 302-1 | Energy consumption within the organization | 50 |
| 302-2 | Energy consumption outside of the organization | 50 |
| 302-3 | Energy intensity | 50 |
| 302-4 | Reduction of energy consumption | 50-52 |
| 302-5 | Reductions in energy requirements of products and services | 50-52 |
| Water and Effluents 2018 | | |
| 303-1 | Interactions with water as a shared resource | 44-47 |
| 303-2 | Management of water discharge-related impacts | 44-47 |
| 303-3 | Water withdrawal | 44-47 |
| 303-4 | Water discharge | 44-47 |
| 303-5 | Water consumption | 44-47 |
| Biodiversity | | |
| 304-1 | Operational sites owned, leased, managed in, or adjacent to protected areas and areas of high biodiversity value outside protected areas | None |
| 304-2 | Significant impacts of activities, products, and services on biodiversity | 38-39 |
| 304-3 | Habitats protected or restored | None |
| 304-4 | IUCN Red List species and national conservation list species with habitats in areas affected by operations | None |

| GRI standards | Title | Pages and Notes |
|---|---|---|
| Emissions 2016 | | |
| 305-1 | Direct (Scope 1) GHG emissions | 41-43 |
| 305-2 | Energy indirect (Scope 2) GHG emissions | 41-43 |
| 305-3 | Other indirect (Scope 3) GHG emissions | 41-43 |
| 305-4 | GHG emissions intensity | 41-43 |
| 305-5 | Reduction of GHG emissions | 41-43 |
| 305-6 | Emissions of ozone-depleting substances (ODS) | 41-43 |
| 305-7 | Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions | 41-43 |
| Waste 2020 | | |
| 306-1 | Waste generation and significant waste-related impacts | 48-49 |
| 306-2 | Management of significant waste-related impacts | 48-49 |
| 306-3 | Waste generated | 48-49 |
| 306-4 | Waste diverted from disposal | 48-49 |
| 306-5 | Waste directed to disposal | 48-49 |
| Environmental Compliance 2016 | | |
| 307-1 | Non-compliance with environmental laws and regulations | None |
| Supplier Environmental Assessment 2016 | | |
| 308-1 | New suppliers that were screened using environmental criteria | 70-71 |
| 308-2 | Negative environmental impacts in the supply chain and actions taken | 70-71 |
| GRI 400: Social | | |
| Employment 2016 | | |
| 401-1 | New employee hires and employee turnover | 101، 103 |
| 401-2 | Benefits provided to full-time employees that are not provided to temporary or part-time employees | 115-116 |
| 401-3 | Parental leave | 115-116 |

| GRI standards | Title | Pages and Notes |
|---|---|---|
| Labor/Management Relations 2016 | | |
| 402-1 | Minimum notice periods regarding operational changes | Whenever there is a change in operation that has an impact on stakeholders (especially employees), these changes are communicated to stakeholders (especially employees) through communication approaches and channels, and the necessary planning is done in this regard |
| Occupational Health and Safety 2018 | | |
| 403-1 | Occupational health and safety management system | 117-121 |
| 403-2 | Hazard identification, risk assessment, and incident investigation | 117-121 |
| 403-3 | Occupational health services | 117-121 |
| 403-4 | Worker participation, consultation, and communication on occupational health and safety | 117-121 |
| 403-5 | Worker training on occupational health and safety | 117-121 |
| 403-6 | Promotion of worker health | 117-121 |
| 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | 117-121 |
| 403-8 | Workers covered by an occupational health and safety management system | 117-121 |
| 403-9 | Work-related injuries | 117-121 |
| 403-10 | Work-related ill health | 117-121 |
| Training and Education 2016 | | |
| 404-1 | Average hours of training per year per employee | 107 |
| 404-2 | Programs for upgrading employee skills and transition assistance programs | 104-107 |
| 404-3 | Percentage of employees receiving regular erformance and career development reviews | 108 |
| Diversity and Equal Opportunity 2016 | | |
| 405-1 | Diversity of governance bodies and employees | 102-103 |
| 405-2 | Ratio of basic salary and remuneration of women to men | There is no significant difference |
| Non-discrimination 2016 | | |
| 406-1 | Incidents of discrimination and corrective actions taken | None |

| GRI standards | Title | Pages and Notes |
|---|---|---|
| Freedom of Association and Collective Bargaining 2016 | | |
| 407-1 | Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | None |
| Child Labor 2016 | | |
| 408-1 | Operations and suppliers at significant risk for incidents of child labor | None |
| Forced or Compulsory Labor 2016 | | |
| 409-1 | Operations and suppliers at significant risk for incidents of forced or compulsory labor | None |
| Security Practices 2016 | | |
| 410-1 | Security personnel trained in human rights policies or procedures | None |
| Rights of Indigenous Peoples 2016 | | |
| 411-1 | Incidents of violations involving rights of indigenous peoples | None |
| Human Rights Assessment 2016 | | |
| 412-1 | Operations that have been subject to human rights reviews or impact assessments | None |
| 412-2 | Employee training on human rights policies or procedures | None |
| 412-3 | Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening | None |
| Local Communities 2016 | | |
| 413-1 | Operations with local community engagement, impact assessments, and development programs | 89-97 |
| 413-2 | Operations with significant actual and potential negative impacts on local communities | None |
| Supplier Social Assessment 2016 | | |
| 414-1 | New suppliers that were screened using social criteria | 70-71 |
| 414-2 | Negative social impacts in the supply chain and actions taken | 70-71 |
| public Policy 2016 | | |
| 415-1 | Political contributions | According to I. R. Iran's regulations and laws, MSC is not allowed to participate in any political process, and this is not the case. |

| GRI standards | Title | Pages and Notes |
|---|---|---|
| Customer Health and Safety 2016 | | |
| 416-1 | Assessment of the health and safety impacts of product and service categories | 59 |
| 416-2 | Incidents of non-compliance concerning the health and safety impacts of products and services | None |
| Marketing and Labeling 2016 | | |
| 417-1 | Requirements for product and service information and labeling | 59 |
| 417-2 | Incidents of non-compliance concerning product and service information and labeling | None |
| 417-3 | Incidents of non-compliance concerning marketing ommunications | None |
| Customer Privacy 2016 | | |
| 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | None |
| Socioeconomic Compliance 2016 | | |
| 419-1 | Non-compliance with laws and regulations in the social and economic areas | None |

## Contact information

Address : MSC Co., isfahan, iran

Postal code: 161-84815

Phone: +98-31-52733333، +98-31-52732200، +98-31-33325325

Fax: +98-31-33324324, +98-31-33320018

Email: info@msc.ir

Website: www.msc.ir

# The Path to Create a Better Future

## Sustainability Report | 2023

Mobarakeh Steel Company (MSC)